

INCH-POUND

ATPD 2224

9 January 1998

SUPERSEDING

MIL-B-45389A

16 November 1979

PURCHASE DESCRIPTION

BULLDOZER, EARTH MOVING: TANK MOUNTED, M9; PREPARATION FOR STORAGE AND SHIPMENT OF

This purchase description is approved for use by the U.S. Army Tank-automotive Materiel Readiness Command, Department of the Army, and is available for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This purchase description covers the preparation for storage and shipment of an earth moving, tank mounted M9 bulldozer; including preservation, packaging, packing and marking.

2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are specified in sections 3 and 4 of this purchase description. This section does not include documents cited in other sections of this purchase description or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirement documents cited in sections 3 and 4 of this purchase description, whether or not they are listed.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: U.S. Army Tank-automotive and Armaments Command, ATTN: AMSTA-TR-E/BLUE, Warren, MI 48397-5000, by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document, or by letter.

AMSC N/A

AREA PACK

DISTRIBUTION STATEMENT A. Approved for public release; distribution is released.

SPECIFICATIONS

FEDERAL

A-A-1492	- Tape, Gummed, Paper, Plain.
A-A-55057	- Panels, Wood/Wood Based; Construction and Decorative.
L-P-378	- Plastic Sheet and Strip, Thin Gauge, Polyolefin.
T-R-571	- Rope, Cotton, or Cotton and Polyester.
QQ-S-698	- Steel, Sheet and Strip, Low Carbon.
SS-R-501	- Roofing Felt Asphalt, Prepared, Smooth-Surfaced.
MMM-A-260	- Adhesive, Water Resistant (For Sealing Waterproof Paper).
PPP-B-1055	- Barrier Material, Waterproofed, Flexible.

DEPARTMENT OF DEFENSE

MIL-C-104	- Crates, Wood; Lumber and Plywood Sheathed, Nailed and Bolted.
MIL-B-117	- Bag, Sleeve and Tubing.
MIL-B-121	- Barrier Material, Greaseproofed, Waterproofed, Flexible.
MIL-C-5501	- Cap and Plug, Protective, Dust and Moisture Seal.
MIL-C-11796	- Corrosion Preventive Compound, Petroleum, Hot Application.
MIL-G-12803	- Gasket Material, Non-metallic.
MIL-PRF-16173	- Corrosion Preventive, Compound Solvent Cutback, Cold-application.
MIL-P-17667	- Paper, Wrapping, Chemically Neutral (Non-corrosive).
MIL-L-21260	- Lubricating Oil, Internal-combustion Engine, Preservative and Break-in.

STANDARDS

DEPARTMENT OF DEFENSE

MIL-STD-129	- Marking for Shipment and Storage.
MIL-STD-2073-1	- Military Packaging, Standard Practice for.
MS15795	- Washer, Flat Metal, Round, General Purpose.
MS21309	- Staple, Ground Wire.
MS27040	- Nut, Plain, Square-Steel, Cadmium Plated.
MS35338	- Washer, Lock-Spring, Helical, Regular (Medium) Series.

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- MS35751 - Bolt, Square Neck, Round Head (Carriage) Steel, Cadmium or Zinc Plated, UNC-2A.

(Unless otherwise indicated, copies of the above specifications, standards, and handbooks are available from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.)

2.2 Other publications. The following documents form a part of this purchase description to the extent specified herein. Unless otherwise indicated, the issue in effect on date of invitation for bids or request for proposal shall apply.

AMERICAN SOCIETY FOR TESTING MATERIALS (ASTM)

- | | |
|--------------|---|
| ASTM A36/36M | - Carbon Structured Steel, Standard Specification for (DoD Adopted). |
| ASTM A108 | - Steel Bars, Carbon, Cold Finished, Standard Quality, Standard Specification for (DoD Adopted). |
| ASTM A519 | - Seamless Carbon and Alloy Steel Mechanical Tubing, Standard Specification for, (DoD Adopted). |
| ASTM A641 | - Zinc Coated (Galvanized) Carbon Steel Wire, Standard Specification for (DoD Adopted). |
| ASTM A809 | - Aluminum Coated (Aluminized) Carbon Steel Wire, Standard Specification for (DoD Adopted). |
| ASTM A818 | - Coppered Carbon Steel Wire E1, Standard Specification for (DoD Adopted). |
| ASTM A853 | - Steel Wire, Carbon, for General Use, Standard Specification for (DoD Adopted). |
| ASTM D1974 | - Closing, Sealing, and Reinforcing Fiberboard, Standard Specification for (DoD Adopted). |
| ASTM D5486 | - Pressure Sensitive Tape for Packaging, Box Closure and Sealing, Standard Specification for (DoD Adopted). |

(Application for copies of ASTM publications may be obtained from the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.)

3. REQUIREMENTS

3.1 First article (preproduction pilot pack). Unless otherwise specified by the procuring activity (see 6.1), a preproduction pilot pack shall be submitted for approval to determine conformance to this purchase description. After approval of the preproduction pilot pack, no

change shall be made in crate construction without the specific approval of the procuring activity (see 6.2 and 6.3).

3.2 Cleaning and drying. Bulldozer, including sub-assemblies, and component parts shall be cleaned in accordance with MIL-STD-2073-1, and dried by any applicable procedure specified therein. Cleaning and drying shall be accomplished without damage to bulldozer.

3.3 Preservation and packaging. Preservation and packaging shall be level A or B as specified (see 6.1).

3.3.1 Level A.

3.3.1.1. Interior surfaces. Interior surfaces of hydraulic cylinders and ram assemblies, reservoir, right angle drive, directional control valve, hydraulic pump, hoses, tubes, armor hydraulic tubes, safety unloader valve assembly and manifold shall be flushed with preservative oil conforming to grade 2 of MIL-L-21260. All openings of internally preserved items, except openings of items packaged method 50 (see figures 27 and 52) and method 42 (see figures 22J, 48 and 55) of MIL-STD-2073-1, shall be sealed prior to exterior preservation. Threaded openings shall be sealed with metal or plastic threaded plugs. Other openings shall be sealed with plastic caps conforming to MIL-C-5501 or with tape conforming to type I, class 1 of ASTM D5486. To minimize sealing operations, parts and assemblies shall be preserved and packaged as nearly as practicable in completely assembled condition.

3.3.1.2 Exterior surfaces. Except as otherwise specified herein, unpainted exterior metal surfaces of the bulldozer component sub-assemblies and parts, including reservoir, moldboard assembly and linkage, guards, hose and tube assemblies, and all items mentioned in 3.3.1.1, except items packaged method 53 and 42, shall be coated with preservative conforming to grade 1 of MIL-PRF-16173. All metallic crate parts, except nails, straps, and anchor plates shall be coated with grade 1 preservative. Exterior unpainted surfaces of right angle drive, oil pump, and mounting plates shall be coated with preservative conforming to grade 2 of MIL-PRF-16173. Exterior unpainted surfaces of directional control valve and safety unloader valve assembly shall be coated with preservative oil conforming to type 2 of MIL-L-21260. Application of preservation to clutch assembly, fabric, rubber, or rubber, or rubber impregnated surfaces shall be avoided. Parts inaccessible after assembly, such as positioning pins and bolts, shall be preserved before assembly.

3.3.1.3 Packaging method. Except as otherwise specified herein, packaging of preserved parts shall meet the requirements for method 20 of MIL-STD-2073-1.

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3.3.1.4 Right angle drive, clutch, oil pump and mounting bracket assembly. Right angle drive, clutch, oil pump and mounting bracket assembly shall be packaged as a unit method of 53 of MIL-STD-2073-1 (see figures 22B, item F, and figures 27 and 52).

3.3.1.5 Miscellaneous bulldozer parts.

3.3.1.5.1 Items packaged in box 1 (see figures 22E through 22H). Miscellaneous bulldozer parts including small fittings such as connectors and elbows shall be assembled to hoses and tubes, where practical. When assembled, the foregoing items shall be processed in accordance with 3.3.1.1. Unpainted metal surfaces of all small fittings such as connectors and elbows not assembled to tubes, hoses, or other assemblies; power take-off parts, and directional control valve controls and linkage shall be coated with preservative conforming to class 2 of MIL-C-11796 and wrapped in barrier material conforming to type II, grade A, class 2 of MIL-B-121. Unpainted metal surfaces of all other parts shall be coated with preservative conforming to grade 4 of MIL-PRF-16173.

3.3.1.5.2 Items packaged in box 2 (see figures 22I and 22J). Unpainted metal surfaces shall be coated with preservative conforming to grade 2 of MIL-PRF-16173, wrapped in barrier material conforming to type II, grade A, class 2 of MIL-B-121 and packaged method 42 of MIL-STD-2073-1. Non-metal parts shall be wrapped in paper conforming to type II of MIL-P-17667 then included in the method 42 package.

3.3.1.5.3 Items packaged in box 3 (see figure 22J and 22K).

3.3.1.5.3.1 Headlamp and brush guard attachments. Unpainted metal surfaces of headlamp and brush guard attaching parts shall be coated with preservative conforming to grade 2 of MIL-PRF-16173, wrapped in barrier material conforming to type II, grade A, class 2 of MIL-B-121, and packaged method 42 of MIL-STD-2073-1.

3.3.1.5.3.2 O-rings, gaskets, seals, and technical literature. O-rings, gaskets, seals, and technical literature shall be included in the same method 42 package as specified in 3.3.1.5.3.1.

3.3.1.5.4 Items packaged in box 4 (see figure 22K).

3.3.1.5.4.1 Lever control assembly. Unpainted metal surfaces of the lever control assembly shall be coated with preservative conforming to class 2 of MIL-C-11796, then wrapped in barrier material conforming to type II, grade A, class 2 of MIL-B-121, and packaged method 20 of MIL-STD-2073-1.

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3.3.1.5.5 Items packaged in box 5 (see figure 22K).

3.3.1.5.5.1 Headlamp adapter assembly. Headlamp adapter assembly shall be wrapped in paper conforming to type II or MIL-P-17667 and packaged method 42 of MIL-STD-2073-1.

3.3.2 Level B. Bulldozer parts and assemblies, including technical literature, shall be preserved and packaged in accordance with 3.3.1, with the following exceptions.

3.3.2.1 Right angle drive, clutch, oil pump and mounting bracket assembly. Right angle drive, clutch, oil pump and mounting bracket assembly shall be preserved in accordance with 3.3.1.1 and 3.3.1.2.

3.3.2.2 Miscellaneous bulldozer parts.

3.3.2.2.1 Items packaged in box 1 (see figures 22E through 22H). Items shall be preserved and packaged in accordance with 3.3.1.5.1, except that unpainted metal surfaces of all small fittings such as connectors and elbows not assembled to tubes, hose or other assemblies; and clutch control linkage shall be coated with preservative conforming to grade 2 of MIL-PRF-16173.

3.3.2.2.2 Items packaged in box 2 (see figures 22I through 22J). Items shall be preserved and packaged in accordance with 3.3.1.5.2, except that only the outside box of the method 42 (see figure 21B, item 35A) shall be used.

3.3.2.2.3 Items packaged in box 3 (see figures 22J through 22K). Items shall be preserved and packaged in accordance with 3.3.1.5.3, except that only the outside box of method 42 (see figure 21C, item 57B) shall be used.

3.3.2.2.4 Items packaged in box 4 (see figure 22K). Items shall be packaged in accordance with 3.3.1.5.4, except that unpainted metal surfaces of the lever control assembly shall be coated with preservative conforming to grade 2 of MIL-PRF-16173.

3.3.2.2.5 Items packaged in box 5 (see figure 22K). Items shall be wrapped in accordance with 3.3.1.5.5 and packaged method 20 of MIL-STD-2073-1, using only the outside box of the method 42 (see figure 21D, item 62B).

3.4 Packing. Packing shall be level A or B as specified (see 6.1).

3.4.1 Level A.

3.4.1.1 Crate construction. Bulldozer crate shall be constructed in accordance with figures 1 and 2 through 21E, and as specified herein. Wood used in construction of crate shall conform to group II of MIL-C-104. Grades of lumber and moisture content shall be as specified in tables I and II. Nails and nailing shall be in accordance with MIL-C-104. Bulldozer parts and sub-assemblies (see figures 22 through 50) shall be packed in accordance with figures 51 through 56, as applicable.

TABLE I. Container lumber - nailed wood crates - framing, sheathing.

Species	Framing		Lowest suitable grade	
	1 - inch (in.)	2 - in.	Sheathing boards	Association grading rules
Softwoods:				
Cedar:				
Western red	No. 2	No. 2	No. 3	WCBLGI
Western red	No. 3	No. 2 dimension	No. 4	WPS
Cypress	No. 2	No. 2	No. 3	SCMA, NHLA
Douglas-fir				
Coast type	No. 2	No. 2	No. 3	WCBLGI
Mountain type	No. 3	No. 2 dimension	No. 4	WPA
Fir, white	No. 3	No. 2 dimension	No. 4	WPA
Hemlock:				
Eastern	No. 2	No. 2	No. 3	NHHMA
West coast	No. 2	No. 2	No. 3	WCBLGI
Larch, western	No. 3	No. 2 dimension	No. 4	WPA
Pine:				
Idaho white	No. 3		No. 4	WPA
Lodgepole	No. 3	No. 2 dimension	No. 4	WPA
Northern white	No. 3	No. 2 dimension	No. 4	NPMA, NELMA
Norway red	No. 3	No. 2	No. 4	NPMA, NELMA
Ponderosa	No. 2	No. 2 dimension	No. 4	WPA
Southern yellow	No. 2 box	No. 2	No. 3	SPIB
Sugar	No. 3	No. 2 dimension	No. 4	WPA
Redwood	Sap common	Sap common	No. 3	CRA
Spruce:	No. 3	No. 2 dimension	No. 4	WPA
Englemann	No. 3	No. 2 dimension	No. 4	WPA
Eastern	No. 2	No. 2	No. 2	NELMA
Sitka	No. 2	No. 2	No. 2	WCBLGI
Hardwoods	No. 2	No. 2 dimension	No. 2	
	construction boards		construction boards	

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- 1/ The grades listed do not necessarily reflect comparability of grades or parity of species and are not so recognized in the industry. The grades shown are minimum standards, and requisitioning agencies should exercise judgment in specifying the above or higher grades appropriate to the end use.
- 2/ Actual thickness to be according to the thickness for species groupings as specified in MIL-C-104.

3.4.1.2 Packing procedure. Bulldozer kit shall be secured in the crate in a manner that will assure protection from physical damage. Prior to packing on the crate base, sub-assemblies and parts shall be assembled in accordance with figures 23 through 50. All sub-assemblies and parts shall be cushioned, blocked, braced and anchored to prevent movement. When tested as specified in 4.4.2, there shall be no damage to any part and no evidence of movement within the crate. Except for items secured to the crate floor or placed in built-in, long, wood box under the moldboard assembly, lighter items shall be positioned above heavier items. Items weighting over 20 pounds (20 lb) and secured by wire (see figure 21C, item 59) shall be double wired. Anchor plates for strapping shall be secured with screw type nails. Nuts, bolts, and strapping used in crate construction, and in securing, blocking and packing shall be tightened. Related small parts shall be kept together. Threads and critical surfaces of unwrapped items shall be cushioned as necessary for protection. Unboxed items shall include, but not be limited to, figures 22A through 22D, items A through Z. Items packed in boxes shall be immobilized. Care shall be exercised to avoid rupture to hoses when nailing top to box. Items shall be packed in boxes constructed in accordance with table III. The items to be placed in each of the boxes shall be in accordance with table III.

TABLE III. Boxed items.

Box construction			Boxed items	
Box No.	Figure	Items	Figures	Items
1	21B	26 through 31	22E through 22H	Y through AL
2	21B	34, 35, 35A and 35B	22I and 22J	(miscellaneous)
3	21C	57, 57A and 57B	22J and 22K	AM through AN-1 & Misc.
4	21C	58	22K	AO
5	21D	62, 62A and 62B	22K	(miscellaneous)

3.4.2 Level B. Packing shall be in accordance with 3.4.1.

3.5 Marking. In addition to any special marking required by the contract or order, exterior containers shall be marked in accordance with MIL-STD-129 (see 6.1).

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract, the contractor is responsible for the performance of all inspection requirements specified herein. Except as otherwise specified in the contract, the contractor may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in the purchase description where such inspections are deemed necessary to assure supplies and services conform to prescribed requirements.

4.2 Contractor's quality assurance system. The contractor shall provide and maintain an effective Quality Assurance System, acceptable to the Government, covering the supplies under the contract. A current written description of the system shall be submitted to the contracting officer prior to initiation of production. The contractor will not be restricted to the inspection listed, provided that an equivalent control is included in the approved quality assurance procedure. The contractor shall notify the Government of, and obtain approval for, any change to the written procedure that might affect the degree of assurance required by this purchase description or other applicable documents referenced herein..

4.3 Government verification. All quality assurance operations performed by the contractor will be subject to Government verification at unscheduled intervals. Verification will consist of surveillance of the operations to determine that practices, methods, and procedures of the written inspection plan are being properly applied, and Government product inspection to measure quality of product offered for acceptance. Deviation from prescribed or agreed-upon procedures, or instances of poor practices which might have an adverse effect upon the quality of the product, will immediately be called to the attention of the contractor. Failure of the contractor to promptly correct deficiencies shall be cause for suspension of acceptance until corrective action has been made, or until conformance of product to prescribed criteria has been demonstrated.

4.4 Inspection provisions.

4.4.1 Lot size. An inspection lot shall consist of all bulldozer kits of one type from an identifiable production period, submitted at one time for acceptance inspection.

4.4.2 Sampling inspection.

4.4.2.1 Visual, dimensional and primary functional inspection. The classification of defects shall be in accordance with table IV.

TABLE IV. Classification of defects.

Categories	Defects	Method of inspection
Major:	(1.0 pct defective)	
101	Improper skidding (inadequate)	Visual
102	Improper boxes	Visual
103	Improper inner packing	Visual
104	Steel strapping (inadequate)	Visual
Minor:	(4.0 pct defective)	
201	Loose strapping	Visual
202	Sharp edges	Visual
203	Improper nailing	Visual
204	Point coverage incomplete or color not as specified	Visual
205	Identification missing or incorrect	Visual
206	Assembly instructions missing or improperly prepared	Visual
207	Excessive cube	Visual

4.4.2.2 Unclassified characteristics. All unclassified defects having no bearing on function, safety, interchangeability or life, but which are considered departures from good workmanship, will be noted in writing.

4.4.3 First article (preproduction pilot pack) test. The preproduction pilot pack (see 3.1) and 1 unit from the first 20 units of production shall be subjected to one of the tests listed in 4.5 except that the drop method shall be conducted only when facilities for neither of the other methods are available.

4.4.3.1 Failure. Exterior damage to panels of containers which have received impact shall not be cause for rejection provided there has been no damage to contents, and that interior framing, bracing, and blocking remain intact.

4.5. Test method and procedures.

4.5.1 Impact tests.

4.5.1.1 Crane method. The pack shall be raised clear of the floor with a crane and moved into position so that one end will just touch a solid, flat vertical barrier while the supporting chain or cable remains vertical. Barrier shall cover no less than 5 pct of the end panel. The pack shall

then be pulled away from the barrier along its arc of free swing for a distance which will cause the pack, when released, to swing and strike the barrier at a speed of approximately 6 miles per hour (6 mi/h). Moving the pack along the arc until the center of gravity is approximately 18 in higher than its original position with a distance of 28 feet (28 ft) between point suspension and center of gravity of pack may be expected to accomplish this impact speed under average conditions. The test shall then be repeated with the other end of the pack striking the barrier.

4.5.1.2 Railroad car method. The pack shall be securely blocked, to prevent movement of the car. Anti-skid plates shall not be used for this test. The car shall be bumped to cause impact at approximately 10 mi/h against three empty railway cars which have brakes fully set.

4.5.1.3 Drop method. One face of the container shall be mounted and supported on a wood still 4 by 6 by 145 in, placed at right angles to the skids. Wood still shall be located not more than 12 in from each end, and under the outer skid's rubbing strips of each side. The opposite end shall then be raised to a height of 12 to 15 in and allowed to fall freely to a hard surface. This test shall be applied once to each end of the container.

5. PACKAGING

Not applicable to this purchase description.

6. NOTES

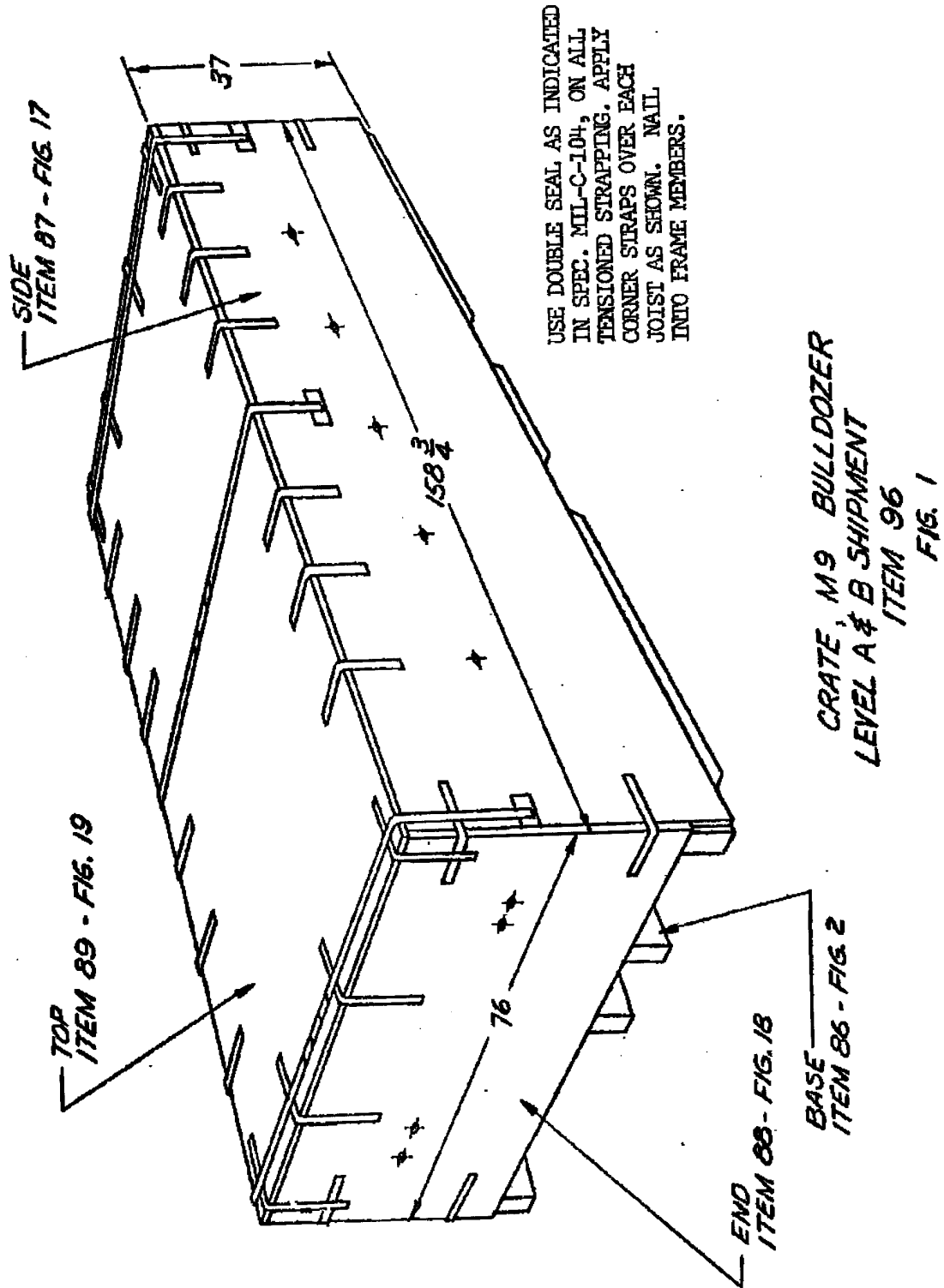
6.1 Ordering data. Procurement documents should specify the following:

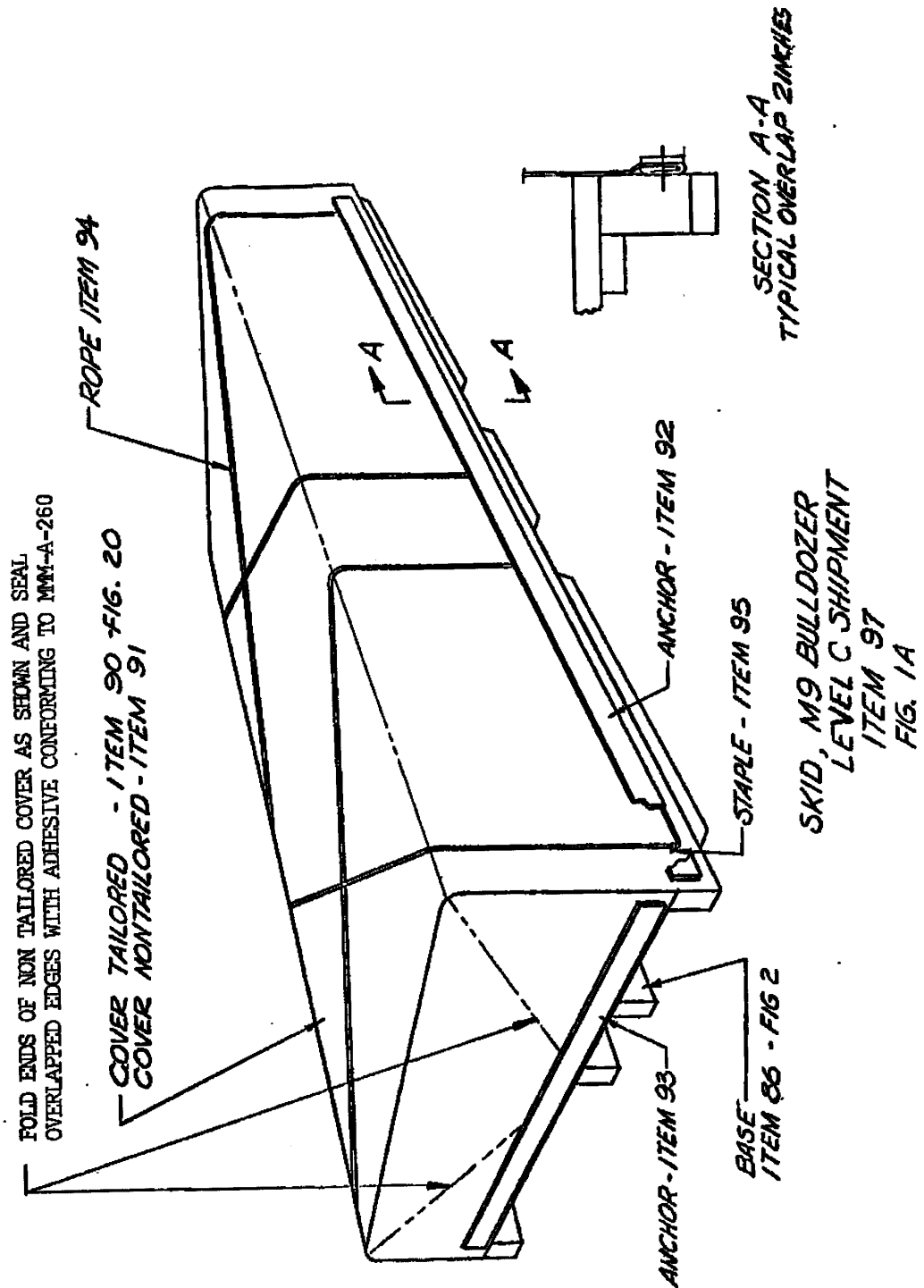
- a. Title, number, and date of this purchase description.
- b. If preproduction pilot pack is required (see 3.1).
- c. Selection of applicable levels of preservation and packaging (see 3.3) and level of packing (see 3.4).
- d. Selection of the applicable cover (see 3.4.3.3).
- e. Any special marking required (see 3.5).

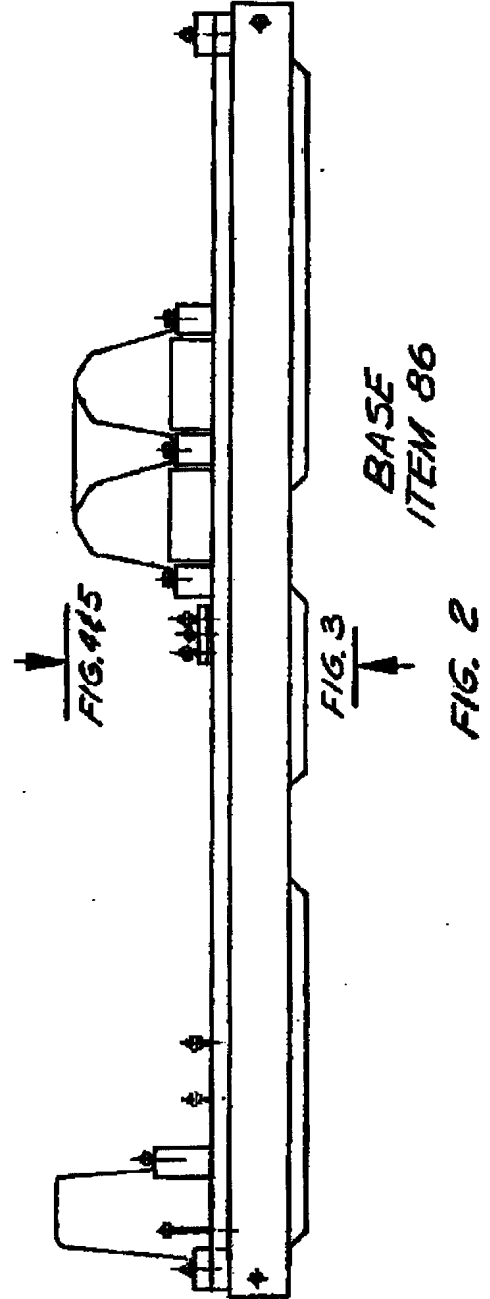
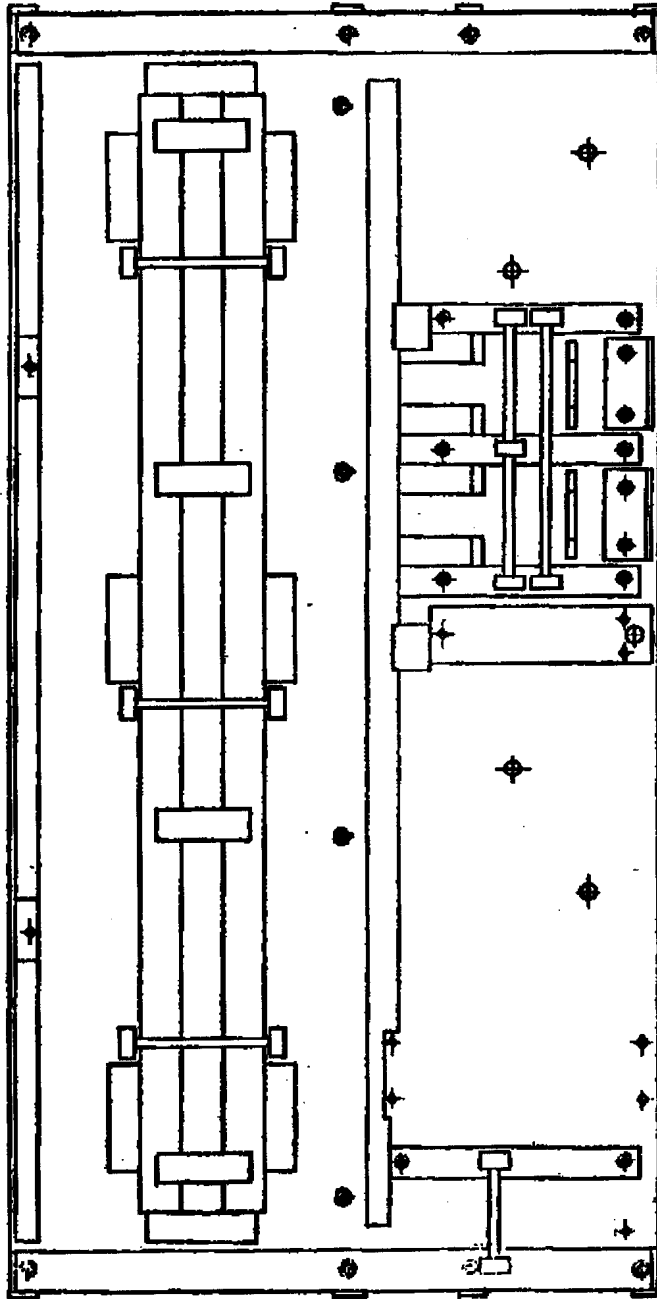
6.2 First article. When a first article is required, it shall be tested and approved under the appropriate provisions of 7-104.55 of the Armed Services Procurement Regulation. The contracting officer should include specific instructions in all procurement instruments regarding arrangements for examination, tests and approval of the first article (see 3.1).

6.3 Recycled materials. The use of recycled materials which meet the requirements of the applicable material specifications without jeopardizing the intended use of the item shall be encouraged (see 3.1).

6.4 Changes from previous issue. Asterisks are not used in this revision, to identify changes with respect to the previous issue, due to the extensiveness of the changes.







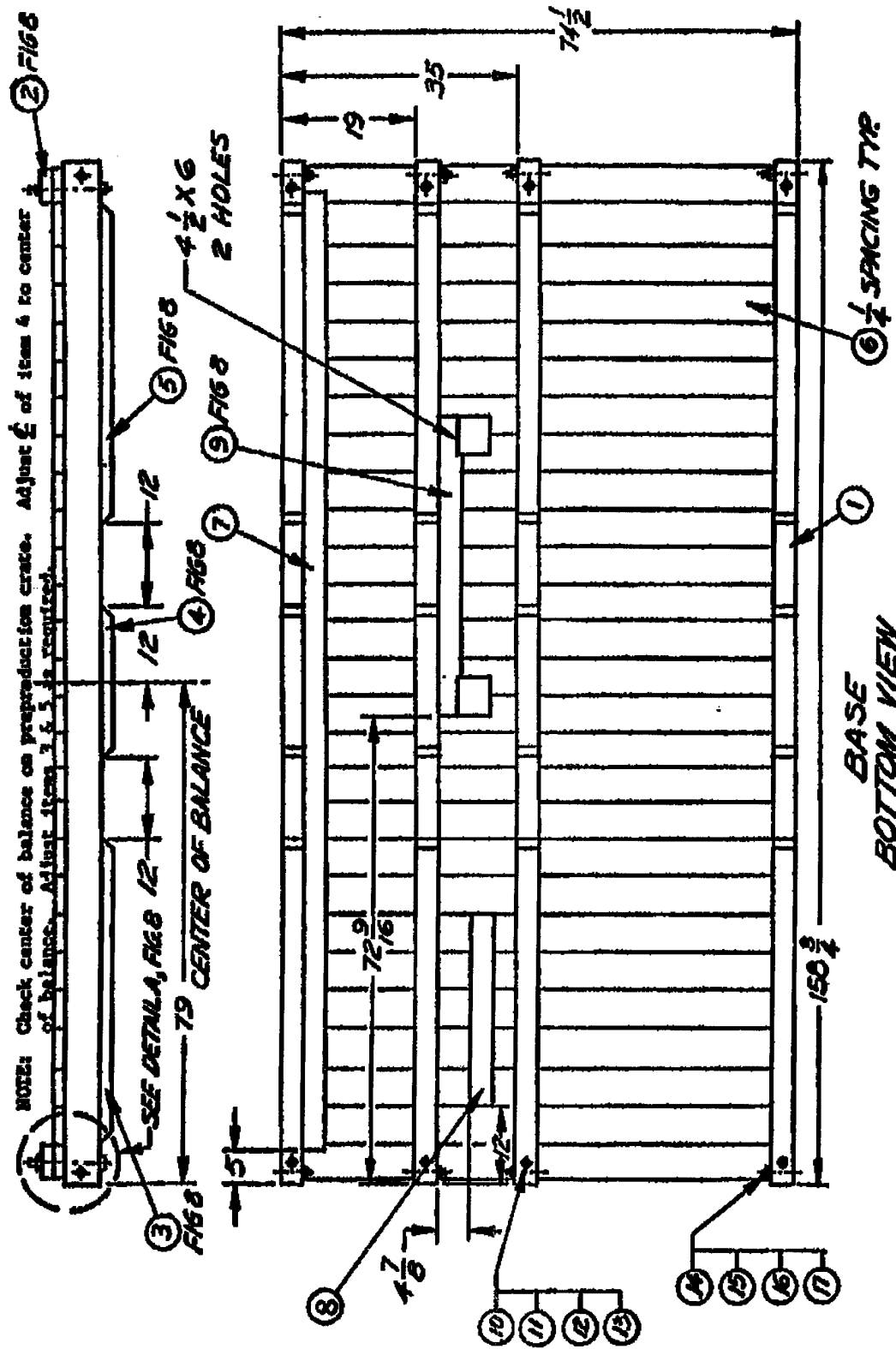


FIG. 3

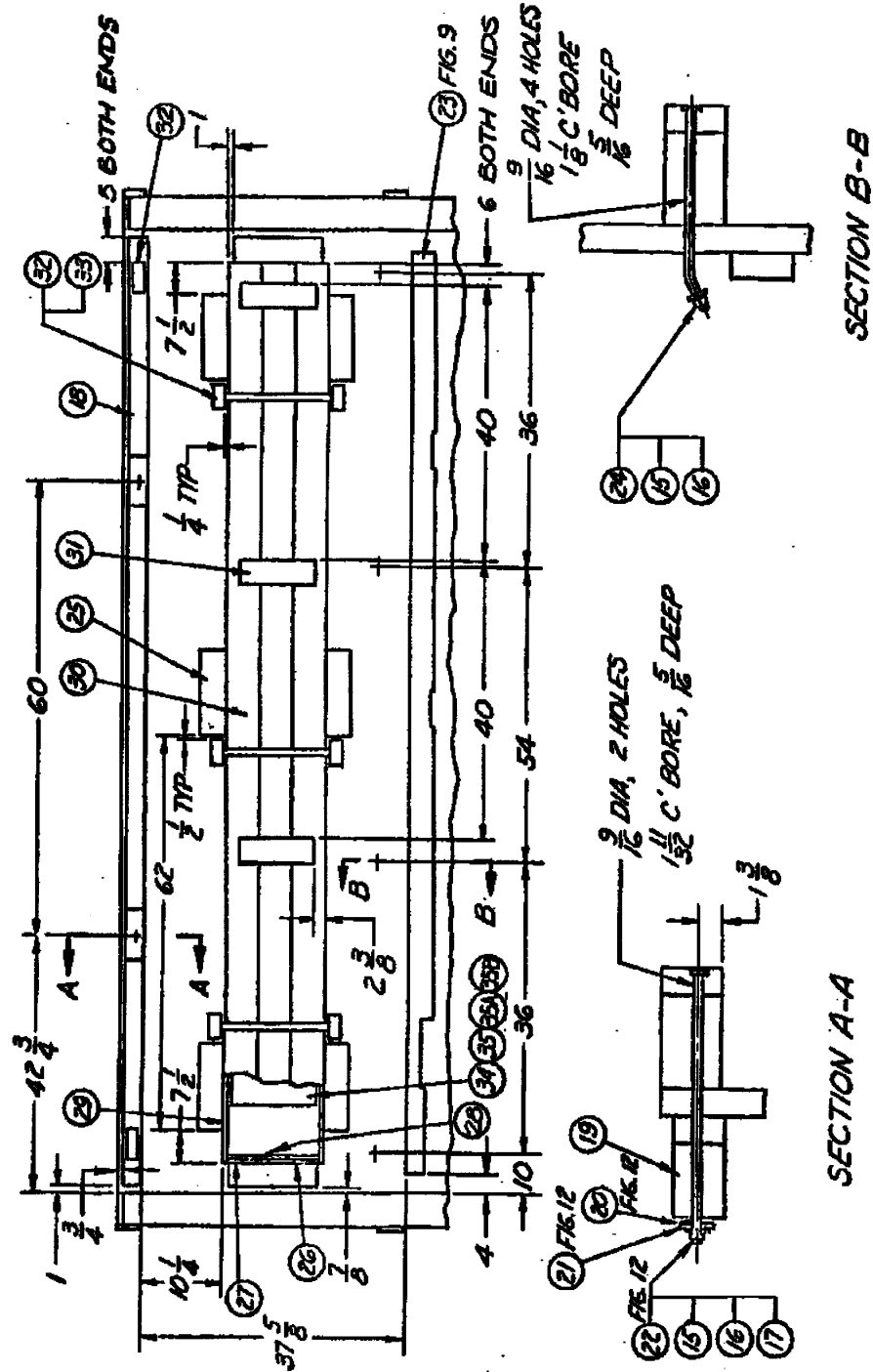


FIG. 4

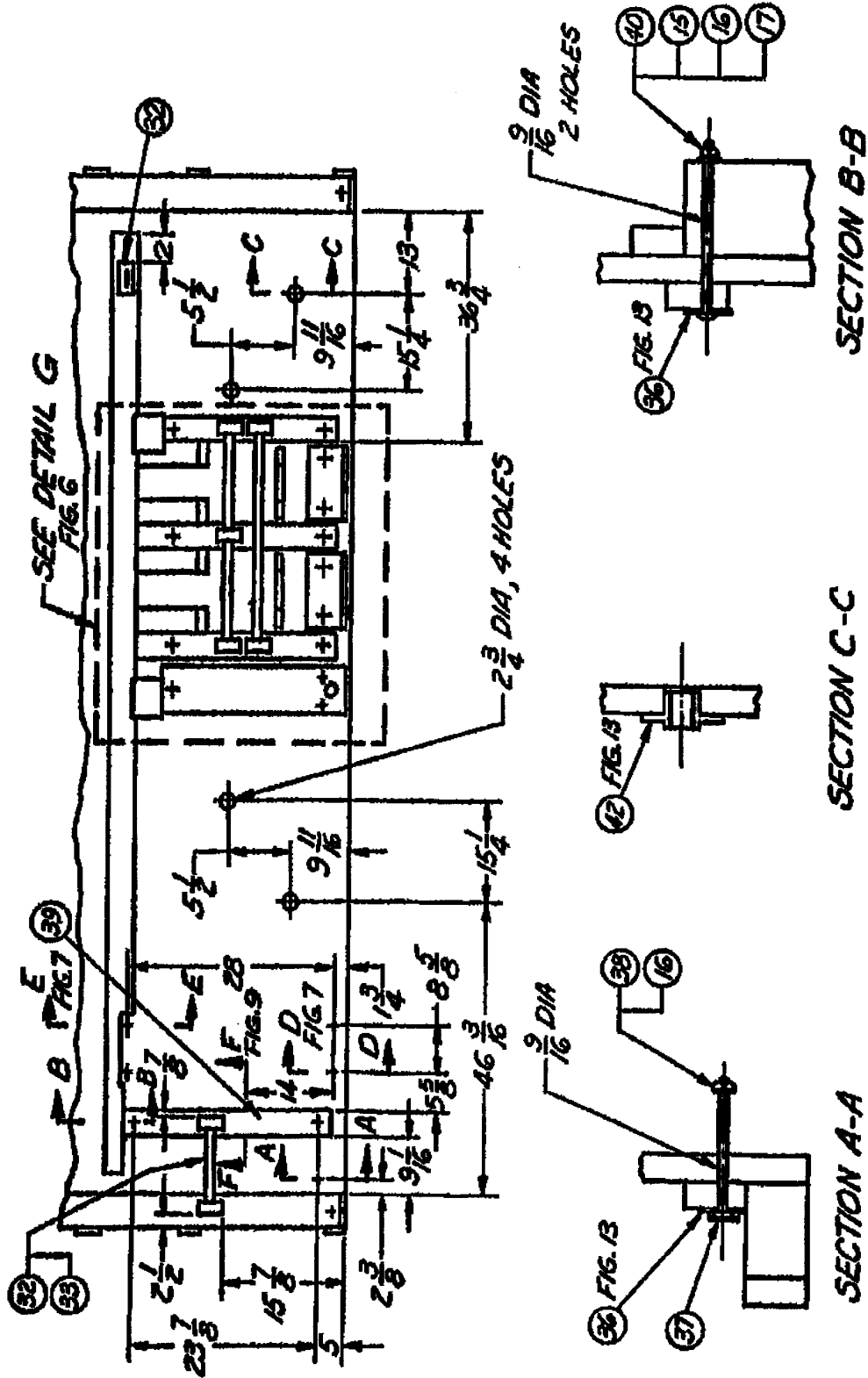
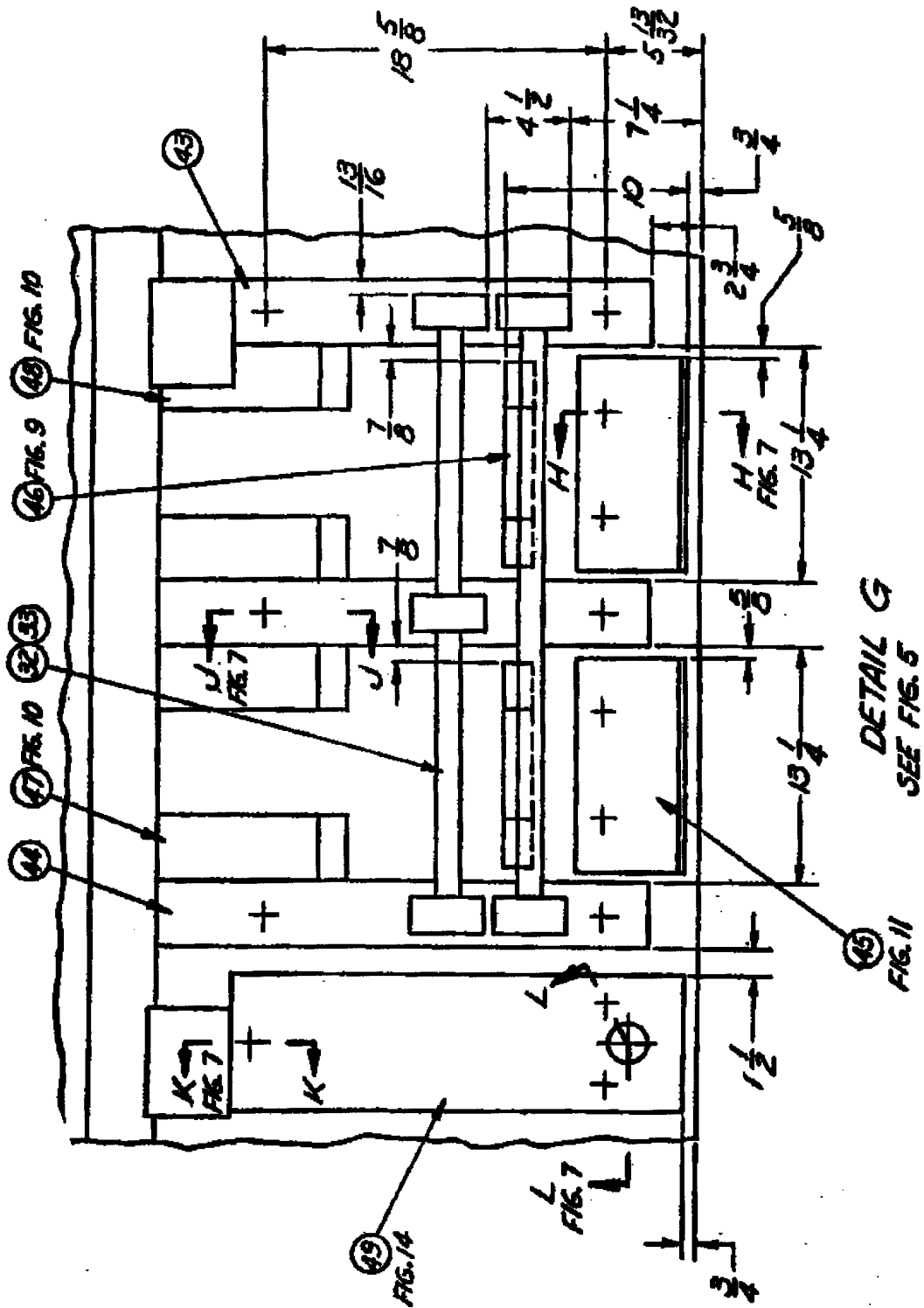
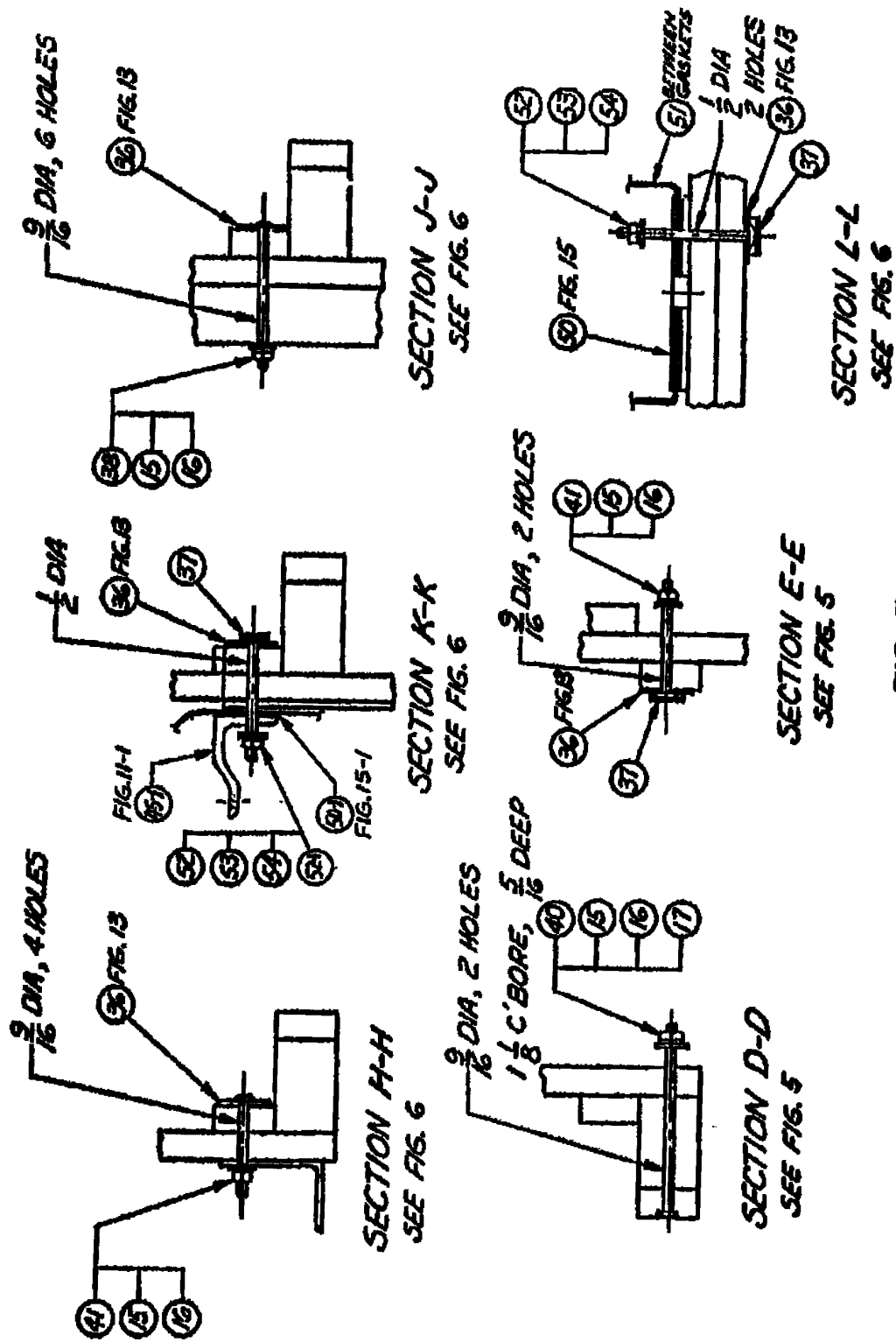
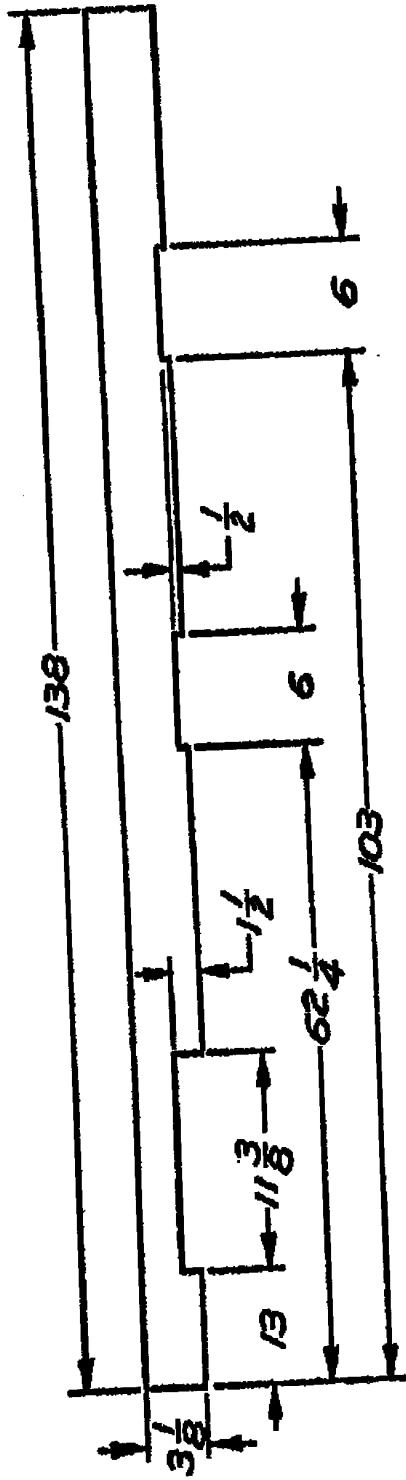


FIG. 5



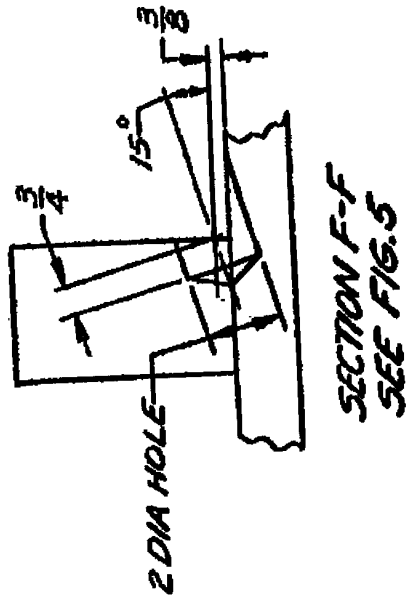
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ITEM 23

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ITEM 46

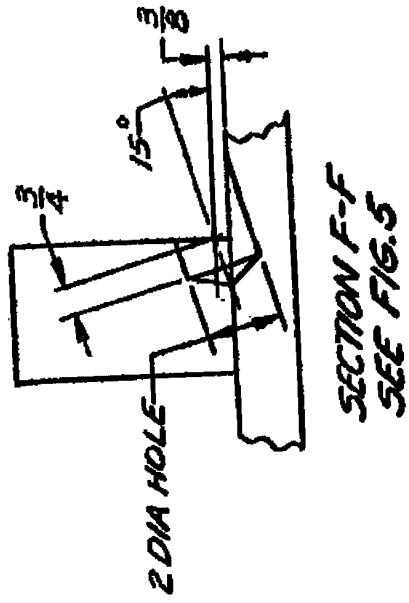
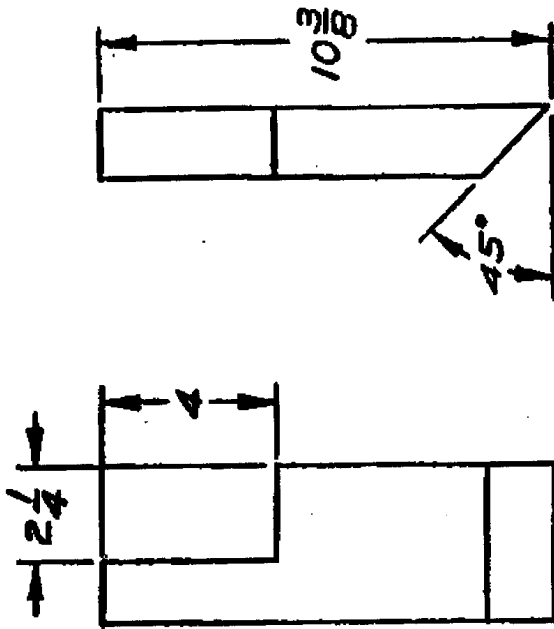
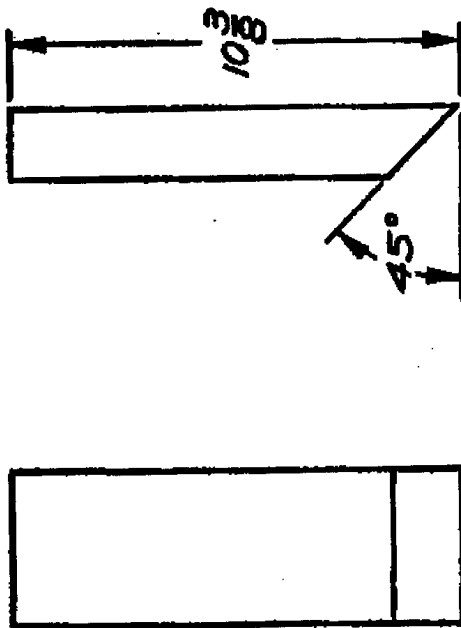


FIG. 9

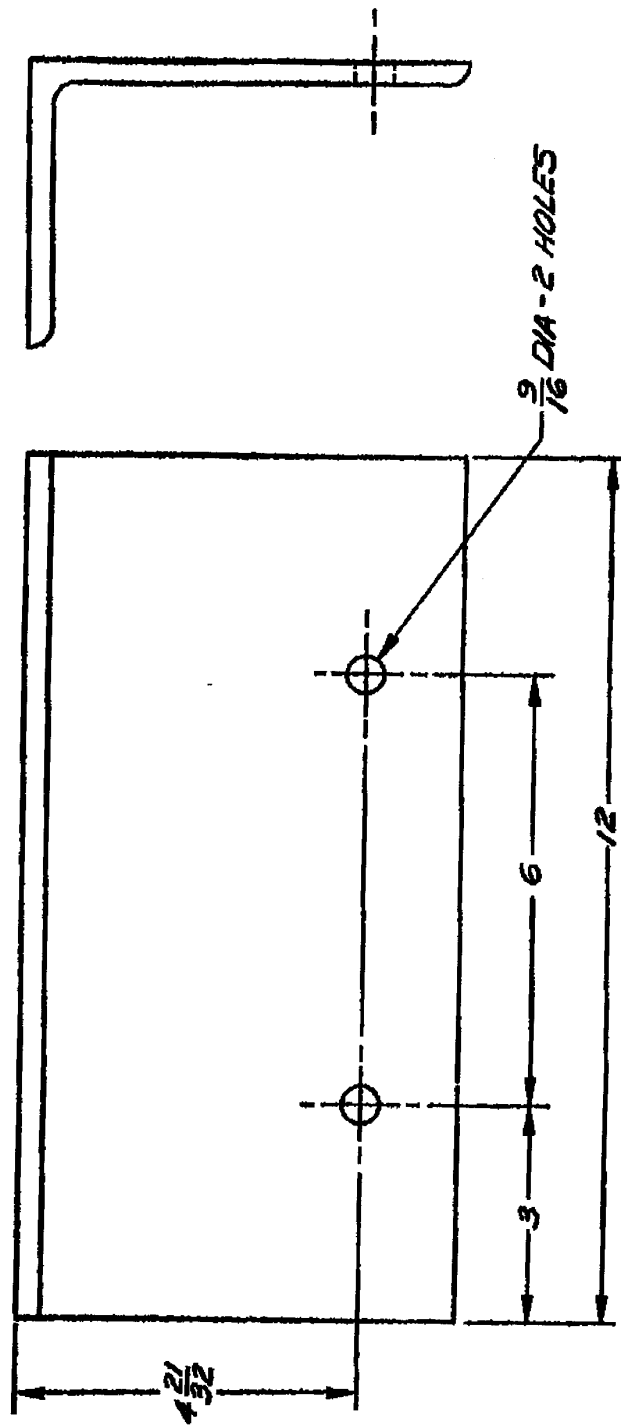


ITEM 48



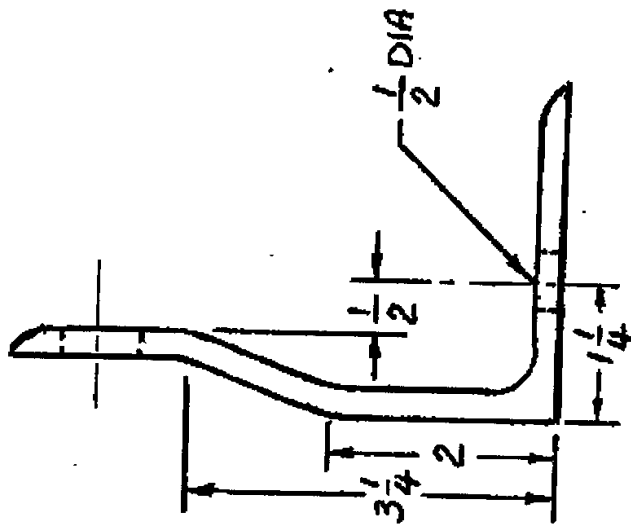
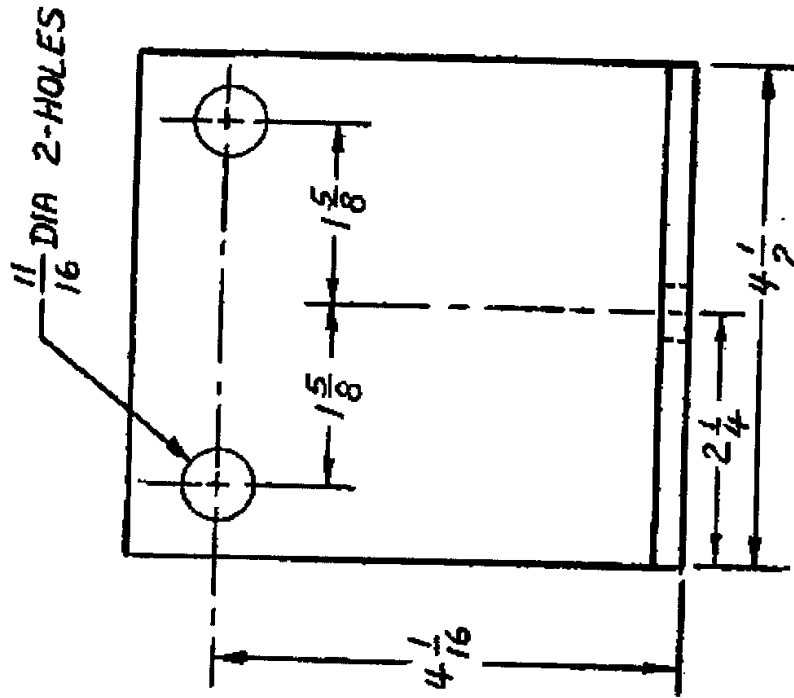
ITEM 47

FIG. 10



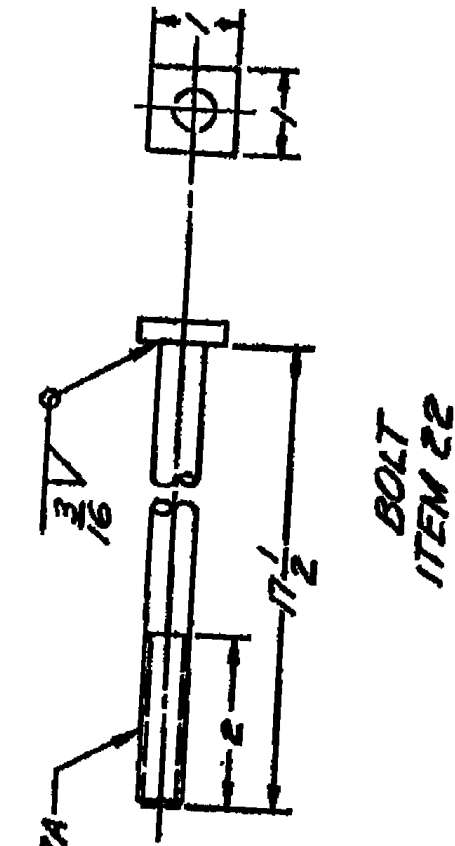
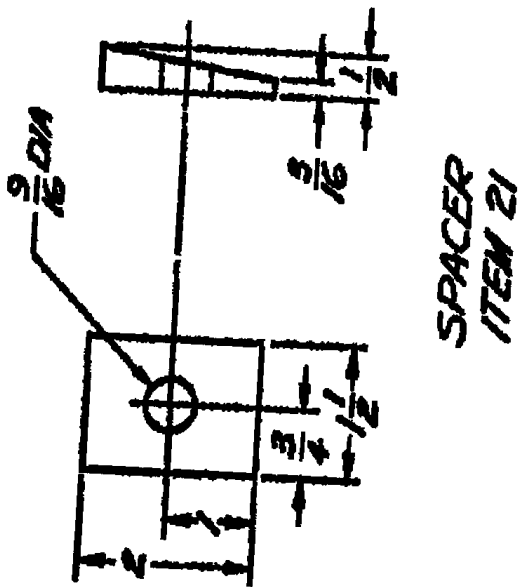
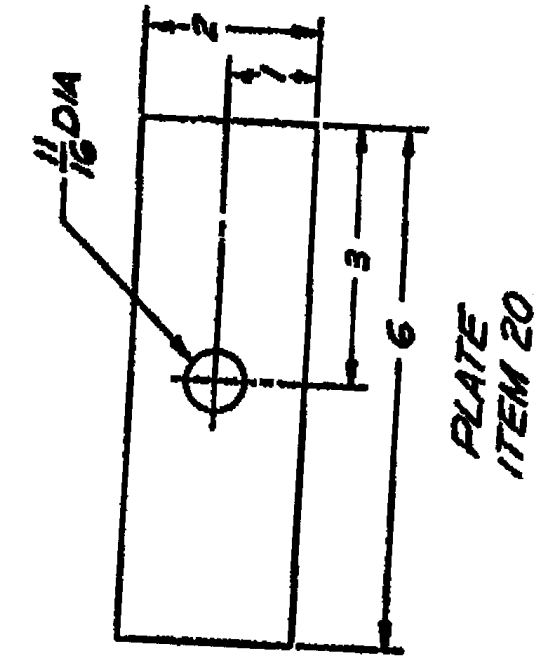
MATERIAL:
STEEL, STRUCTURAL
SPEC. ASTM A36
5 X 3 X $\frac{1}{4}$ ANGLE

**ANGLE PLATE
ITEM 45
FIG. 11**



MATERIAL:
STEEL, STRUCTURAL
SPEC. ASTM A36
5 X 3 X $\frac{1}{4}$ ANGLE

ANGLE PLATE
ITEM 45-1
FIG. 11-1



ITEM'S 20 & 21
MATERIAL:
STEEL, SPEC. ASTM A108,
1/2 THICK

ITEM 22
MATERIAL:
STEEL, SPEC. ASTM A108
1/2 DIA. ROD, 1/4 THICK PLATE

FIG. 12

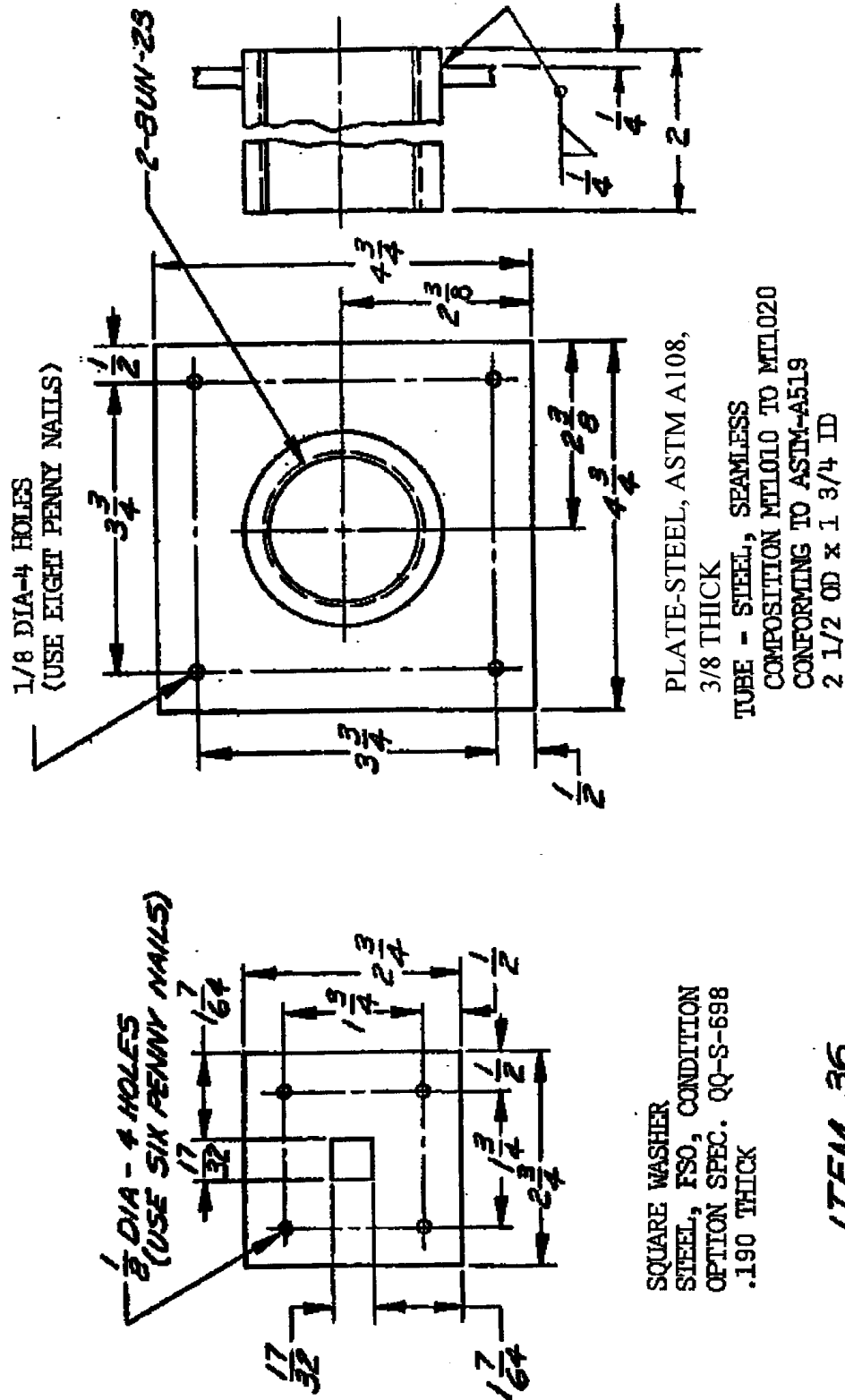
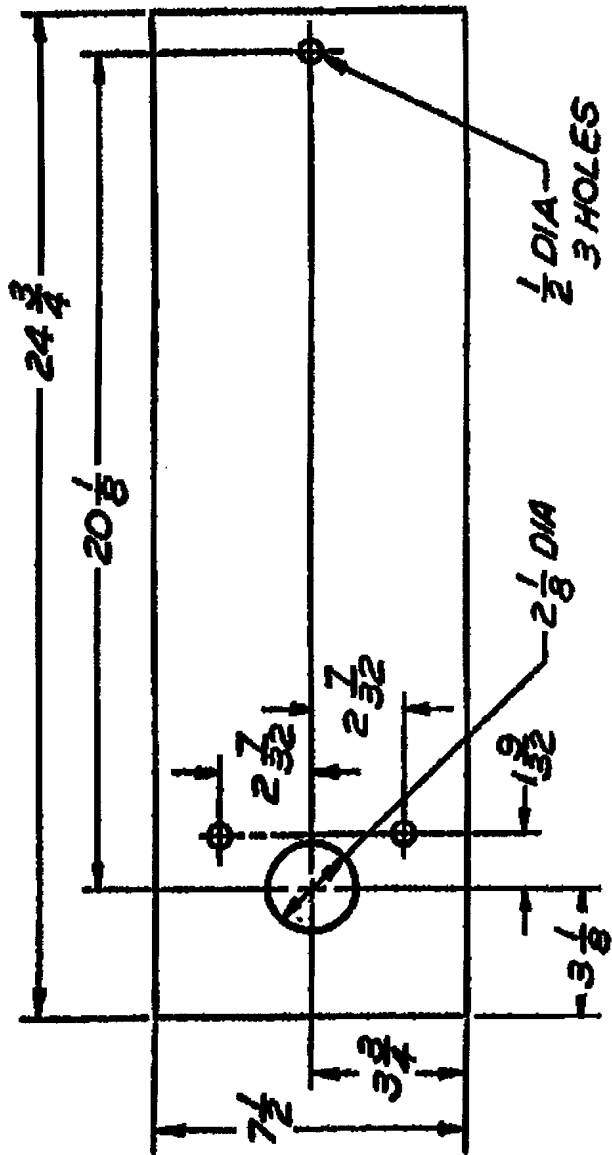
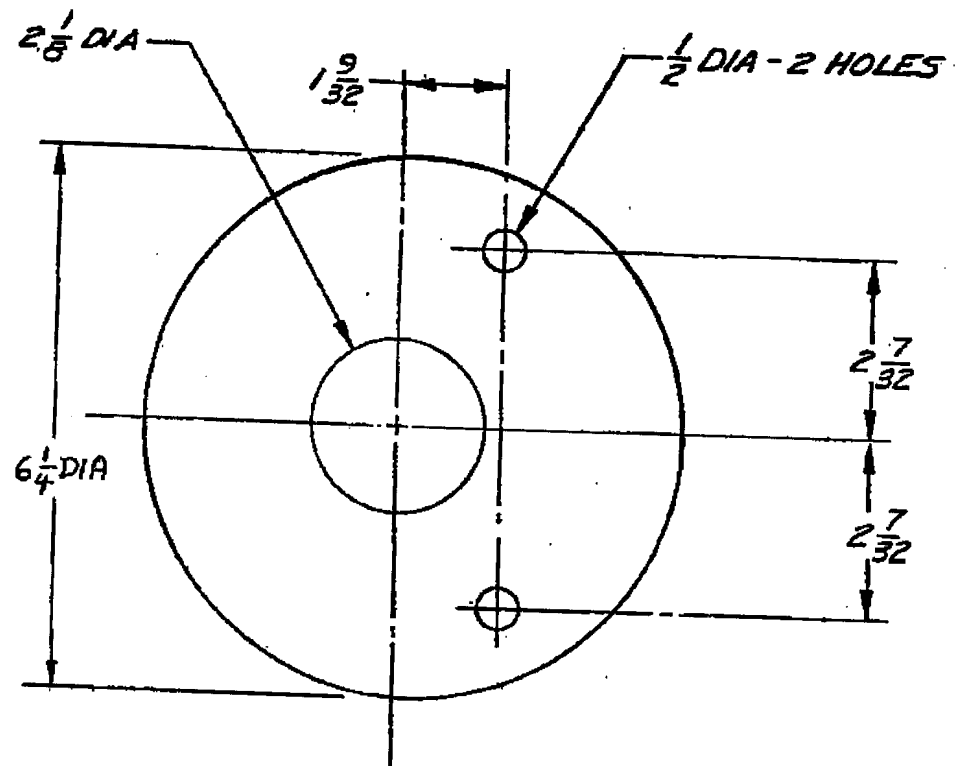


FIG. 13



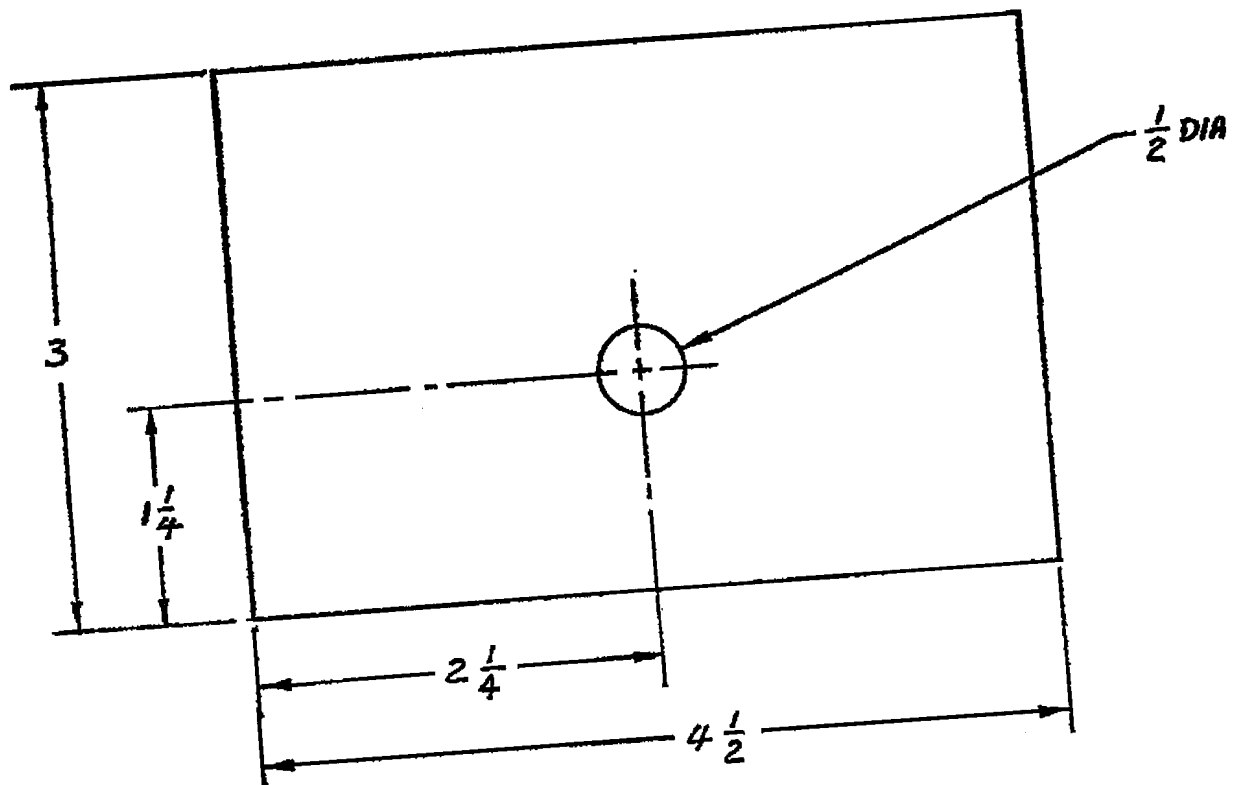
SPACER BLOCK
ITEM 49
FIG 14



MATERIAL:
 GASKET. IDENT. NO. P3200-A
 SPEC MIL-G-12803
 1/16 THICK

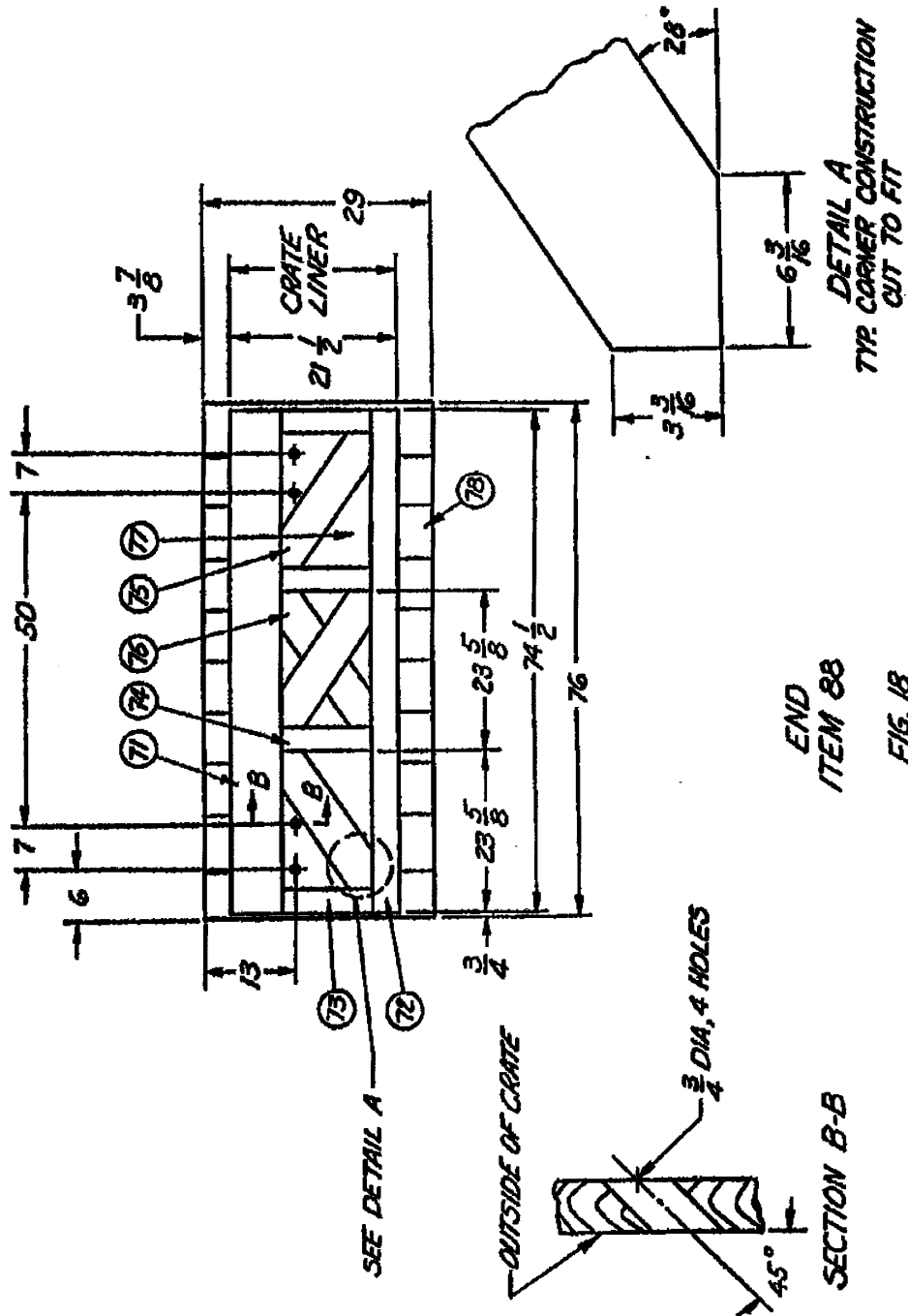
GASKET
 ITEM 50

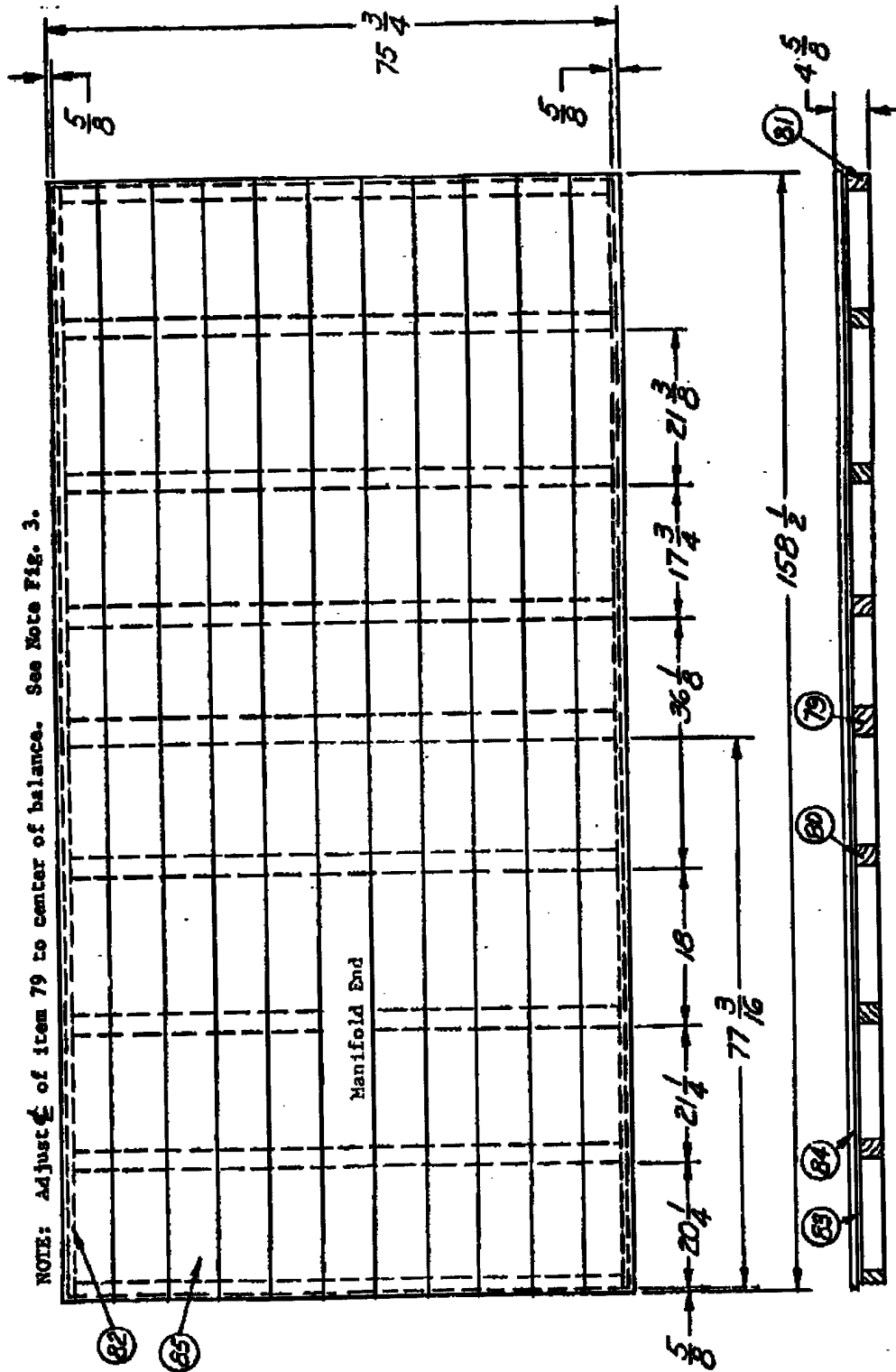
FIG. 15



MATERIAL:
GASKET, IDENT. NO.
P3200-A SPEC MIL-G-12803
1/16 THICK

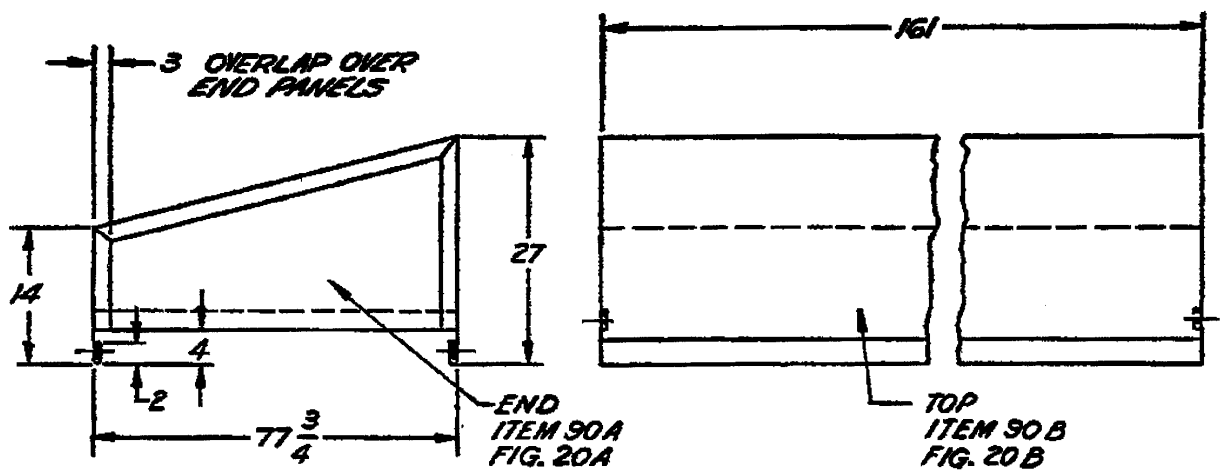
GASKET
ITEM 50-1
FIG. 16





TOP
ITEM 89

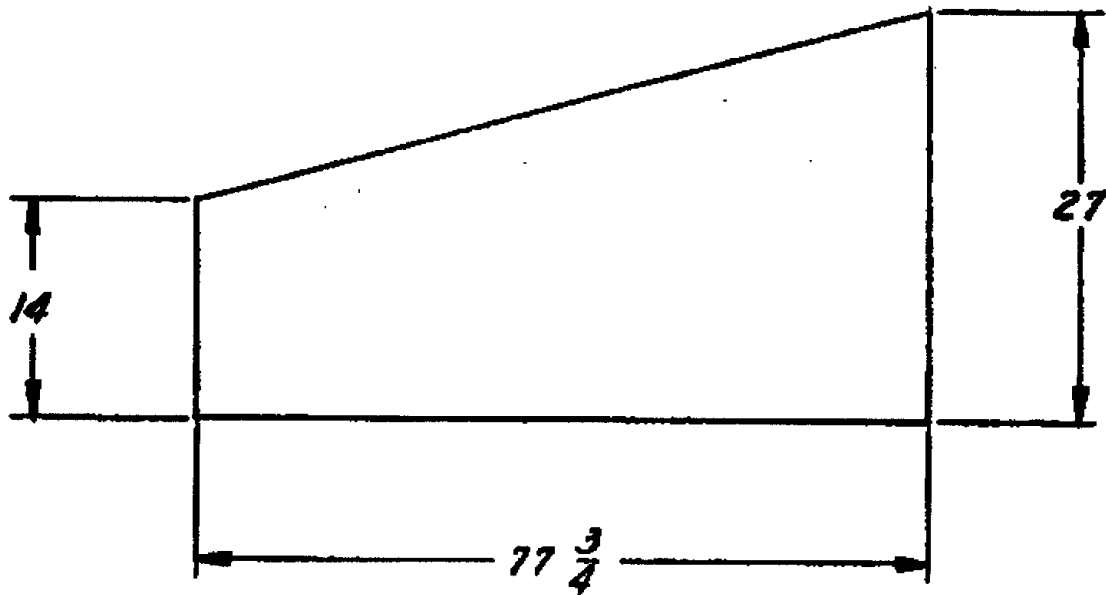
FIG. 19



OVERLAPPED EDGES SHALL
BE SEALED TO END PANEL
WITH ADHESIVE CONFORMING
TO SPEC MMM-A-260

**COVER, TAILORED
ITEM 90**

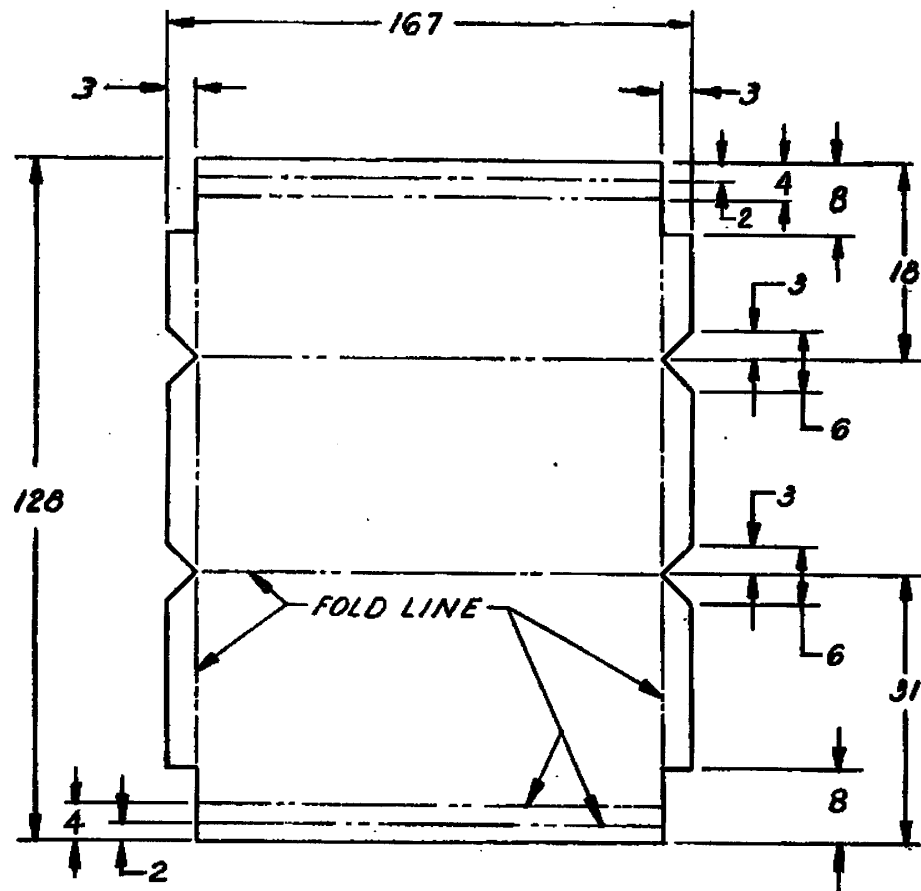
FIG. 20



MATERIAL:

BARRIER MATERIAL CONSISTING OF 2 LAYERS CONFORMING TO PPP-B-1055
 REINFORCEMENT, WITH ONE LAYER OF POLYOLEFIN, .004 INCH THICK CONFORMING L-P-378
 POSITIONED BETWEEN THE TWO LAYERS OF BARRIER MATERIAL. BARRIER MATERIAL AND POLYOLEFIN SHALL BE SPOT GLUED TOGETHER WITH ADHESIVE CONFORMING TO MMM-A-260. ADHESIVE SHALL BE SPOT GLUED WITH A MAXIMUM DISTANCE BETWEEN SPOTS OF FOUR (4) INCHES.

*END
 ITEM 90A
 FIG. 20A*



MATERIAL:

BARRIER MATERIAL CONSISTING OF 2 LAYERS CONFORMING TO PP-B-1055 REINFORCEMENT, WITH ONE LAYER OF POLYOLEFIN, .004 INCH THICK CONFORMING L-P-378 POSITIONED BETWEEN THE TWO LAYERS OF BARRIER MATERIAL. BARRIER MATERIAL AND POLYOLEFIN SHALL BE SPOT GLUED TOGETHER WITH ADHESIVE CONFORMING TO MMM-A-260. ADHESIVE SHALL BE SPOT GLUED WITH A MAXIMUM DISTANCE BETWEEN SPOTS OF FOUR (4) INCHES.

TOP
ITEM 90B
FIG 20B

ATPD 2224

CRATE BILL OF MATERIAL

M9 BULLDOZER

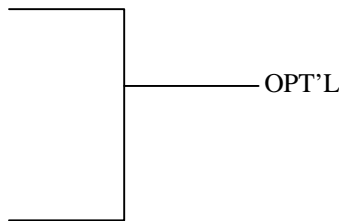
ITEM	MAT'L SIZE OR PART NAME	ORD. NO.	QTY.	FIG.
96	CRATE, M9 BULLDOZER (LEVEL A AND B SHIPMENT)		1	1
86	BASE		1	2
87	SIDE		2	17
88	END		2	18
89	TOP		1	19
97	SKID, M9 BULLDOZER (LEVEL C SHIPMENT)		1	1A
86	BASE		1	2
90	COVER (TAILORED)		1	20
90A	END		2	20A
90B	TOP		1	20B
91	COVER (NON-TAILORED) 130 X 215, SEE FIG. 20A OR 20B FOR MATERIAL		1	
92	ANCHOR BOARD (3/4 X 3 5/8 X 157)		2	
93	ANCHOR BOARD (3/4 X 3 5/8 X 74)		2	
94	ROPE, COTTON, SPEC. T-R-571 1/4 DIA.		AS REQ'D.	
95	STAPLES	MS21309-2 AS REQ'D.		

FIG. 21

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ITEM	MAT'L SIZE OR PART NAME	ORD. NO.	QTY.	FIG.
		BASE		
1	3 5/8 X 5 5/8 X 158 3/4		4	
2	3 5/8 X 5 5/8 X 74 1/2		2	8
3	1 5/8 X 3 5/8 X 50 3/8		4	8
4	1 5/8 X 3 5/8 X 24		4	8
5	1 5/8 X 3 5/8 X 48 3/8		4	8
6	1 5/8 X 74 2/3 X 146		1	
7	1 5/8 X 3 5/8 X 148 3/4		1	
8	1 5/8 X 3 5/8 X 30		1	
9	1 5/8 X 3 5/8 X 46 7/8		1	8
10	BOLT 5/8-11 X 10	MS35751-174	8	
11	PLAIN WASHER 5/8	MS15795-221	8	
12	LK WASHER 5/8	MS35338-50	8	
13	NUT 5/8-11	MS27040-15	8	
14	BOLT 1/2 -13 X 4 1/2	MS35751-136	8	
15	PLAIN WASHER 1/2	MS15795-219	30	
16	LK WASHER 1/2	MS35338-48	31	
17	NUT 1/2-13	MS27040-14	14	
18	1 5/8 X 3 1/8 X 144		1	
19	3 1/8 X 4 1/2 X 8		2	
20	PLATE		2	12
21	SPACER		2	12
22	BOLT		2	12
23	1 5/8 X 3 5/8 X 138		1	9

FIG. 21A

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ITEM	MAT'L SIZE OR PART NAME	ORD. NO.	QTY.	FIG.
		BASE CONT.		
24	BOLT W/NUT 1/2 - 13 X 13	591017 (BADX4.1)	4	
25	1 5/8 X 3 5/8 X 15		8	
26	3/4 X 4 5/8 X 4 1/4	BOX #1	6	
27	3/4 X 1 1/2 X 4 1/4		2	
28	3/4 X 4 1/4 X 15 3/8		2	
29	3/4 X 4 1/4 X 137		2	
30	3/4 X 5 5/8 X 137		3	
31	3/4 X 4 5/8 X 12		4	
32	ANCHOR PLATE (FOR 1 1/4 STRAP)		16	
33	STRAPPING W"SEALS .035 X 1/4 (NAILLESS)		AS REQ'D.	
34	FIBER BOX (15 X 15 X 3 5/8) SPEC. ASTM D1974, AS APPLICABLE	BOX #2	1	
35	BAG, SPEC. MIL-B-117 TYPE I, CLASS E (METHOD 1A-14)		1	
35A	FIBER BOX (15 1/4 X 15 1/4 X 4 1/8) SPEC. ASTM D1974 CLASS 2 GRADE W5c (OUTSIDE BOX-METHOD 1A-14)*		1	
35B	TAPE 2 INCH WIDTH SPEC. A-A-1492 (CLOSURE OF INSIDE BOX-METHOD 1A-14)		AS REQ'D.	
36	SQUARE WASHER		18	13
37	STRAPPING-.035 X 1 1/4 (NAIL ON)		AS REQ'D.	
38	BOLT W/NUT 1/2 - 13 X 8	MS35751-142	7	
39	3 5/8 X 5 5/8 X 27		1	

FIG. 21B

ATPD 2224

ITEM	MAT'L SIZE OR PART NAME	ORD. NO.	QTY.	FIG.
		BASE CONT.		
40	BOLT 1/2 -13 X 10	MS35751-146	4	
41	BOLT W/NUT 1/2 - 13 X 5	MS35751-137	6	
42	PLATE		4	13
43	3 5/8 X 3 5/8 X 22 7/8		1	
44	3 5/8 X 3 5/8 X 26 7/8		2	
45	ANGLE		2	11
45-1	ANGLE		1	11-1
46	SUPPORT		2	9
47	1 5/8 X 3 5/8 X 10 3/8		3	10
48	1 5/8 X 3 5/8 X 10 3/8		1	10
49	1 X 7 1/2 X 24 1/4 PLYWOOD SPEC. A-A-55057		1	14
50	GASKET		2	15
50-1	GASKET		2	16
51	FLOATING BAG-METHOD 53 SPEC. MIL-STD-2073-1		1	
52	BOLT 7/16 - 14 X 5 1/2	MS35751-112	3	
52-1	NUT	MS27040-13	3	
53	PLAIN WASHER 7/16	MS15795-217	3	
54	LK WASHER 7/16	MS35337-28	3	
55	1 5/8 X 3 5/8 X 24		1	
56	2 X 5 5/8 X 14		1	

FIG. 21C

ATPD 2224

ITEM	MAT'L SIZE OR PART NAME	ORD. NO. BASE CONT.	QTY.	FIG.
57	FIBER BOX (38 1/2 X 13 X 3 1/4) SPEC. ASTM D1974, TYPE I, CLASS I, (INSIDE BOX-METHOD 1A-14)**		1	
57A	BAG, SPEC. MIL-B-117 TYPE I, CLASS E METHOD 1A-14		1	
57B	FIBER BOX (38 3/4 X 13 1/4 X 3 3/4) SPEC. ASTM D1974, CLASS 2 GRADE V3C (OUTSIDE BOX-METHOD 1A-14)*			
58	FIBER BOX (5 1/4 X 11 X 11 1/2) (BOX 4) SPEC. ASTM D1974, TYPE I, W6C		1	
59	WIRE, STEEL, CARBON .080 DIA. BLACK FINISH SPEC. ASTM A853, A818, A641, OR A809, AS APPLICABLE	22-W-1633-160 (BFWXI)	AS REQ'D.	
60	TAPE, 2 INCH WIDTH SPEC. PPP-T-76 (CLOSURE OF OUTSIDE BOXES METHOD 1 & 1A-14)		AS REQ'D.	
62	FIBER BOX (14 1/2 X 10 X 6) SPEC. ASTM D1974, TYPE I, CLASS I, (INSIDE BOX-METHOD 1A-14)**		1	
62A	BAG, SPEC. MIL-B-117 TYPE I, CLASS E METHOD 1A-14		1	
62B	FIBER BOX (14 3/4 X 10 1/4 X 6 1/2) SPEC. ASTM D1974, CLASS 2, GRADE W5C (OUTSIDE BOX-METHOD 1A-14)*			
**	SEE ITEM 35B FOR CLOSURE TAPE OF INSIDE BOXES			
*	SEE ITEM 60 FOR CLOSURE TAPE OF OUTSIDE BOXES			
63	1 5/8 X 7 1/2 X 154		1	
64	3/4 X 3 5/8 X 12 3/8		1	
65	1 5/8 X 3 5/8 X 12 3/8		2	
66	3/4 X 3 5/8 X 12 3/8		4	

FIG. 21D

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ITEM	MAT'L SIZE OR PART NAME	ORD. NO.	QTY.	FIG.
67	3/4 X 5 5/8 X 29 3/16		5	
68	3/4 X 5 5/8 X 13 5/16		2	
69	BARRIER MATERIAL SPEC. PPP-B-1055		AS REQ'D.	
70	3/4 X 34 1/4 X 157 1/4		1	
END				
71	1 5/8 X 7 1/2 X 74 1/2		1	
72	3/4 X 3 5/8 X 74 X 1/2		1	
73	1 5/8 X 3 5/8 X 10 3/8		2	
74	3/4 X 3 5/8 X 10 3/8			2
75	3/4 X 5 5/8 X 22 1/2			3
76	3/4 X 5 5/8 X 9 13/16		2	
77	BARRIER MATERIAL SPEC. PPP-B-1055		AS REQ'D.	
78	3/4 X 29 X 76		1	
TOP				
79	3 5/8 X 3 5/8 X 73		1	
80	2 5/8 X 3 5/8 X 73		6	
81	1 5/8 X 3 5/8 X 73		2	
82	3/4 X 2 5/8 X 157 1/4		2	
83	1/4 X 74 1/2 X 157 1/4 PLYWOOD SPEC. A-A-55057		1	
84	LINER, ROOFING FELT SPEC. SS-R-501 (45 LBS. MIN. WT)		AS REQ'D.	
85	3/4 X 75 3/4 X 158 1/2		1	

FIG. 21E

ATPD 2224

PACKING LIST

KIT, BULLDOZER, EARTH-MOVING
TANK-MOUNTING, M9
FOR M60 TANK

TABLE OF CONTENTS

UNBOXED ITEMS	FIG.NO. 22A-22D
BOX NO. 1	22E-22H
BOX NO. 2	22I-22J
BOX NO. 3	22J-22K
BOX NO. 4	22K
BOX NO. 5	22K

FIG. 22

ATPD 2224

UNBOXED ITEMS

ITEM NO.	FIG.	PART NO.	PART NAME	QTY.
A.	FIG. 23	11659092	BLADE ASSY	1 W/
		11659027	PUSH BEAM ASSY	2
		11659028	ARM ASSY	2
		11637640-1	PIN	4
		11637640-2	PIN	2
		11637640-4	PIN	2
		11637640-5	PIN	2
		11637640-6	PIN	2
		11637238	LOCK	12
		MS90726-160	SCREW	12
		MS35335-39	LK WASHER	12
B.	FIG. 24	10883747	MANIFOLD ASSY	1 W/
		8396828	SWIVEL ASSY	1
		7363052	UNION	1
		7699877	PAD	2
		10883885	PIN	2
		MS35303-116	SCREW	1
		MS35303-114	SCREW	5
		MS35337-29	LK WASHER	6
		MS15795-219	WASHER	6
		MS35291-165	SCREW	2
		MS35337-31	LK WASHER	2
		MS15796-220	WASHER	4
		MS35291-63	SCREW	6
		MS35339-27	LK WASHER	6
		137185	COTTER PIN	2
C.	FIG. 25	12257383	RESERVOIR ASSY	1
D.	FIG. 26	10883626	BRACKET, MTG, L	1 W/
		8709446	CAP	2
		223868	BOLT	6
		MS35338-53	LK WASHER	6
		8709448	CAP	1
		10911673	SCREW	3
		8715761	NUT	3
		10883772	PIN	1
		MS90725-64	SCREW	3
		MS35338-46	LK WASHER	3
		MS35303-117	SCREW	1
		MS35337-29	LK WASHER	4
		MS15795-218	WASHER	4

FIG. 22A

ATPD 2224

UNBOXED ITEMS (CONT'D)

ITEM NO.	FIG.	PART NO.	PART NAME	QTY.
		MS35303-118	SCREW	3
		11659061-1	ARM	1
		11637640-3	PIN	1
		11637238	LOCK	1
		MS90726-160	SCREW	1
		MS35335-39	LK WASHER	1
E.	FIG. 26	10883627	BRACKET, MFG, R	1 W/
		809446	CAP	2
		223868	BOLT	6
		MS35338-53	LK WASHER	6
		8709448	CAP	1
		10911673	SCREW	3
		8715761	NUT	3
		10883772	PIN	1
		MS90725-64	SCREW	3
		MS35338-46	LK WASHER	3
		MS35303-117	SCREW	1
		MS35337-29	LK WASHER	4
		MS15795-218	WASHER	4
		10933861	EYE ASSY	1
		7739108	BOLT	1
		MS35303-113	SCREW	3
		11659061-2	ARM	1
		11637640-3	PIN	1
		11637238	LOCK	1
		MS90726-160	SCREW	1
		MS35335-39	LK WASHER	1
F.	FIG. 27	10940668	POWER TAKE-OFF ASSY	1 W/
		7340002	FLANGE	4
		MS35291-111	SCREW	8
		MS35337-29	LK WASHER	8
		10940666	RING ASSY	1
		7383694	GASKET	1
		MS90725-35	SCREW	2
		MS35338-26	LK WASHER	2
		54684	GASKET	2
G.	FIG. 28	10940524-1	CYLINDER & RAM ASSY	1 W/
		MS35291-109	SCREW	4
		8724192	REDUCER	2
		7383745	GUARD	1

FIG. 22 B

ATPD 2224

UNBOXED ITEMS (CONT'D)

ITEM NO.	FIG.	PART NO.	PART NAME	QTY.
		MS90728-112	SCREW	4
		MS35337-29	LK WASHER	8
		7383742	GUARD	1
		MS35303-113	SCREW	4
		MS15795-219	GUARD	1
		MS27183-18	WASHER	4
		MS35303-113	SCREW	4
		MS35337-29	LK WASHER	4
		MS15795-219	WASHER	4
		8744719	LUG	4
H.	FIG. 28	10940524-2	CYLINDER & RAM ASSY	1 W/
		MS35291-109	SCREW	4
		8724192	REDUCER	2
		7383745	GUARD	1
		MS90728-112	SCREW	4
		MS35337-29	LK WASHER	8
		7383743	GUARD	1
		MS35303-113	SCREW	4
		MS15795-219	WASHER	4
		10883762	GUARD	1
		MS27183-18	WASHER	4
		MS35303-113	SCREW	4
		MS35337-29	LK WASHER	4
		MS15795-219	WASHER	4
		8744719	LUG	4
I.	FIG. 29	10883789	GUARD	1 W/
		MS35391-110	SCREW	5
		MS35337-29	LK WASHER	6
		MS35303-114	SCREW	2
		MS15795-219	WASHER	3
		503282	NUT	3
		10883774	BRACKET	1
		MS35291-111	SCREW	1
		MS35291-114	SCREW	1
J.	FIG. 29	10883769	GUARD	1 W/
		10883768	PLATE	1
		MS35291-110	SCREW	2
		MS35337-29	LK WASHER	2

FIG. 22C

ATPD 2224

UNBOXED ITEMS (CONT'D)

ITEM NO.	FIG.	PART NO.	PART NAME	QTY.
K.	FIG. 30	10884065	GUARD LH	1 W/
		MS35303-113	SCREW	1
		MS35337-29	LK WASHER	1
		MS15795-219	WASHER	1
L.	FIG. 30	0884066	GUARD RH	1 W/
		MS35303-113	SCREW	1
		MS35337-29	LK WASHER	1
		MS15795-219	WASHER	1
M.	FIG. 31	10884207	GUARD	1 W/
		10884187	GASKET	1
		10884179	COVER	1
		MS35291-62	SCREW	6
		MS35339-27	LK WASHER	10
		10884184	BELLCRANK ASSY	1
		MS35291-61	SCREW	4
*MI.	FIG. 32	10887388	HOUSING ASSY	1 W/
		108874361	SHAFT	1
		10887490	ARM	1
		10887407	ARM	1
		124543	KEY	2
		10885434	LK WASHER	1
		MS35337-29	LK WASHER	1
		MS15795-218	WASHER	1
		MS35690-823	NUT	1
		MS35337-26	LK WASHER	1
		MS15795-212	WASHER	1
		MS35690-523	NUT	1
		*MS35304-216	SCREW	2
N.	FIG. 33	10884243	GUARD	1 W/
		10884206	GASKET	1
		10884198	COVER	1
		MS35291-62	SCREW	4
		MS35339-27	LK WASHER	4
		10887481	LINK ASSY	1
		10915544	SCREW	1
		10887471	BOLT, SHOULDER	1

*HOUSING ASSY ITEM MI AND 2-MS35304-216 SCREWS TO BE PACKAGED INSIDE OF ITEM M GUARD.

FIG. 22D

ATPD 2224

UNBOXED ITEMS (CONT'D)

ITEM NO.	FIG.	PART NO.	PART NAME	QTY.
O.	FIG. 34	8675761	HOSE ASSY	1
P.	FIG. 34	10883802	TUBE	1
Q.	FIG. 34	10883803	TUBE	1
R.	FIG. 34	10883823	TUBE	1
S.	FIG. 34	10883825	TUBE	1
T.	FIG. 34	10883886	TUBE	1
U.	FIG. 34	10883887	TUBE	1
V.	FIG. 34	10883600	PLATE	1
W.	FIG. 34	10884145	GUARD ASSY	1
X.	FIG. 34	10884146	GUARD ASSY	1
		12257356	FIXTURE	1
		12258357	FIXTURE	1
		7953755	BRACKET	2

BOX 1

Y.	FIG. 35	10884493	HANGER	1 W/
		MS35291-111	SCREW	1
		MS35337-29	LK WASHER	3
		MS35690-803	NUT	3
		10884494	PLATE	1
		MS35291-113	SCREW	2

NOTE: THE FOLLOWING QUANTITIES ARE REQUIRED TO MAKE (2) ASSEMBLIES OF ITEM Z.

Z.	FIG. 36	8709802	HOOK	2 W/
		MS51054-74	SCREW	2
		MS35691-33	NUT	2
AA.	FIG. 37	10940698	BRACKET	1 W/
		7699818	SPACER	4
		MS90726-14	SCREW	4
		MS35338-29	LK WASHER	4

FIG. 22E

ATPD 2224

BOX 1 (CONT'D)

ITEM NO.	FIG.	PART NO.	PART NAME	QTY.
AB.	FIG. 38	10883659	ELBOW	1 W/
		7340000	FLANGE	2
		MS35291-89	SCREW	4
		MS35337-28	LK WASHER	4
		10883657	FLANGE	2
		MS35291-113	SCREW	6
		MS35337-29	LK WASHER	6
AC.	FIG. 39	10883660	ELBOW	1 W/
		7340001	FLANGE	2
		MS35291-113	SCREW	10
		MS35337-29	LK WASHER	10
		10883657	FLANGE	2
AD.	FIG. 40	8675765	HOSE ASSY	1 W/
		7339950	ELBOW ASSY	1
		7335558	SEAL ASSY	1
		10884527	ADAPTER	1
AE.	FIG. 41	8675765	HOSE ASSY	1 W/
		7339950	ELBOW	1
		7335558	SEAL ASSY	1
AF.	FIG. 42	11590939	SHAFT	1 W/
		8709801	ARM	1
		MS35756-14	KEY	1
		MS90725-117	SCREW	1
		MS35338-48	LK WASHER	1
AG.	FIG. 43	10883696	HANDLE ASSY	1 W/
		10883667	SUPPORT	1
		MS35691-37	NUT	1
		MS35812-11	CLEVIS	1
		MS35810-6	CLEVIS PIN	1
		MS24665-353	COTTER PIN	1
AH.	FIG. 44	10884430	ROD	1 W/
		10883915	LUG	2
		MS35291-59	SCREW	2
		MS15795-214	WASHER	2
		585994	PIN	2
		10940378-1	BRACKET	1
		10940378-2	BRACKET	1

FIG. 22F

ATPD 2224

BOX 1 (CONT'D)

ITEM NO.	FIG.	PART NO.	PART NAME	QTY.
AI.	FIG. 45	10884201	U-BOLT	1 W/
		10884203	SPACER	1
		MS35338-29	LK WASHER	2
		MS15795-219	WASHER	2
		MS35690-803	NUT	2

NOTE: THE FOLLOWING QUANTITIES ARE REQUIRED TO MAKE (2) ASSEMBLIES OF ITEM AJ.

AJ.	FIG. 46	10883657	FLANGE	8 W/
		MS35291-116	SCREW	12
		MS35337-29	LK WASHER	12
		MS35690-803	NUT	12
AK.	FIG. 47	10887731	BLOCK	1
		10915469-2	SUPPORT	1
		MS35292-111	SCREW	2
		MS35337-29	LK WASHER	2
		MS15795-218	WASHER	2
AL.	FIG. 47	10887731	BLOCK	1
		10915469-1	SUPPORT	1
		MS35292-111	SCREW	2
		MS35337-29	LK WASHER	2
		MS15795-218	WASHER	2
		10883827	TUBE	1
		10883658	PLATE	2
		10884205	BRACKET	1
		10883785	GUARD	1
		8675762	HOSE ASSY	1
		10883645	BRACKET	5
		10873961	BRACKET	5
		8686843-1	HOSE ASSY	1
		8686844-1	HOSE ASSY	1
		10883821	GUARD	2
		7350920	ELBOW	4
		10905215	NIPPLE	2
		10899965	ELBOW	2
		7339970	ELBOW	2
		10899964	HOSE ASSY	2
		10900387	HOSE ASSY	2
		10899963	ELBOW	4
		10887736	ROD ASSY	1

FIG. 22G

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BOX 1 (CONT'D)

ITEM NO.	FIG.	PART NO.	PART NAME	QTY.
		10887738	ROD ASSY	1
		10884196	GUARD	1
		10887737	ROD ASSY	1
		10887739	ROD ASSY	1
		10940226-1	SUPPORT	1
		10952187	BLOCK	2
		10940226-2	SUPPORT	1
		10883783	SUPPORT	1
		10883784	SUPPORT	1
		10883780	GUARD	2
		7699894	SPROCKET ASSY	1
		10884255	BRACKET	1
		10952230	COVER ASSY	4
		12257288	SUPPORT	2
		12257289-1	STOP	1
		12257289-2	STOP	1
		12257287	GUSSET	2
		12257286-1	STOP	1
		12257286-2	STOP	1
		12257291	SPACER	4
		10952095	WRENCH, SPANNER	1
		MS16146-2	WRENCH, SPANNER	1

BOX 2

		MS35291-5	SCREW	2
		MS35292-36	SCREW	3
		MS35292-7	SCREW	4
		MS35303-66	SCREW	8
		MS35304-206	SCREW	10
		MS35304-215	SCREW	12
		171482	SCREW	4
		MS35763-33	BOLT	4
		MS35763-68	BOLT	4
		10883763	BOLT	2
		10883650	BOLT	2
		10887246	BOLT	4
		MS90728-4	SCREW	2
		11640676	BOLT (SEE NOTE ON FIG. 23)	4
		MS35337-26	LK WASHER	4
		MS35337-27	LK WASHER	4

FIG. 22H

ATPD 2224

BOX 2 (CONT'D)

ITEM NO.	FIG.	PART NO.	PART NAME	QTY.
		MS35333-23	LK WASHER	4
		MS35338-51	LK WASHER (SEE NOTE ON FIG. 23)	4
		MS35338-33	LK WASHER	10
		MS35338-51	LK WASHER	4
		MS27183-10	WASHER	2
		MS15795-214	WASHER	6
		MS15795-215	WASHER	8
		MS27183-16	WASHER	5
		MS15795-218	WASHER	18
		MS15795-219	WASHER	4
		MS15795-222	WASHER	6
		7027834	WASHER	1
		10873955	WASHER	10
		MS35690-402	NUT	18
		MS35690-1228	NUT	4
		MS35691-622	NUT	6
		7383581	NUT	4
		MS51967-23	NUT (SEE NOTE ON FIG. 23)	4
		MS35691-45	NUT	2
		MS35335-19	LK WASHER	4
		MS35338-44	LK WASHER	2
		MS27183-14	WASHER	2
		MS51812-25	NIPPLE	2
		MS51815-37	ELBOW	1
		MS51819-37	ADAPTER	1
		AN6240-1	FILTER	1
		11590958	BUSHING	4
		12257378	ELBOW	1
		MS35763-37	SCREW	4
		MS90726-92	SCREW	5
		MS35338-28	LK WASHER	5
		MS35291-34	SCREW	1
		121224	COTTER PIN	4
		500875	FASTENER	4
		588146	RIVET	4
		MS35743-18	RIVET	8
		MS90726-115	SCREW	2
		MS35690-825	NUT	2
		MS35338-29	LK WASHER	2
		MS27183-18	WASHER	2
		MS24665-426	COTTER PIN	6

FIG. 221

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BOX 2 (CONT'D)

ITEM NO.	FIG.	PART NO.	PART NAME	QTY.
		MS90727-169	SCREW	4
		11590958	BUSHING	4
			BOX 3	
AM.	FIG. 48	10951613	BRACKET	1 W/
		10951610	LEAD ASSY	1
		MS39061-1	SWITCH	1
		8376499	LAMP ASSY	1
		420465	SCREW / LK WASHER	4
		MS39062-1	CIRCUIT BREAKER	1
		MS35225-47	SCREW	2
		MS35337-23	LK WASHER	2
		MS35649-82	NUT	2
AL.	FIG. 49	10951609	LEAD ASSY	1 W/
		7982404	CONNECTOR	1
		8338561	SHELL	1
		7982907	PLUG	1
AN-I.	FIG. 49-1	12257377	LEAD ASSY	1 W/
		MS21333-126	CLAMP	1
		MS90728-57	SCREW	1
		MS35338-46	LK WASHER	1
		MS27183-14	WASHER	1
		10951611	LEAD ASSY	1
		10951612	LEAD ASSY	1
		MS28762-6-0740	HOSE	1
		MS21333-126	CLAMP	4
		7014010	GASKET	4
		12257745	GUARD	1
		MS35206-280	SCREW	2
		12257379	BRACKET	1
		12257381	TUBE ASSY	1
		MS28778-6	PACKING	2
		546868	GASKET	4
		7335557	SEAL ASSY	1
		7335558	SEAL ASSY	1
		7324411	SEAL ASSY	2
		10884217	GASKET	1
		7699926	GASKET	2
		501236	GASKET	1
		546861	GASKET	1

FIG. 22J

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BOX 3 (CONT'D)

ITEM NO.	FIG.	PART NO.	PART NAME	QTY.
		10884301	PLATE, NAME	1
		TM9-2590-209-14	TECHNICAL MANUAL (JULY 1977)	1

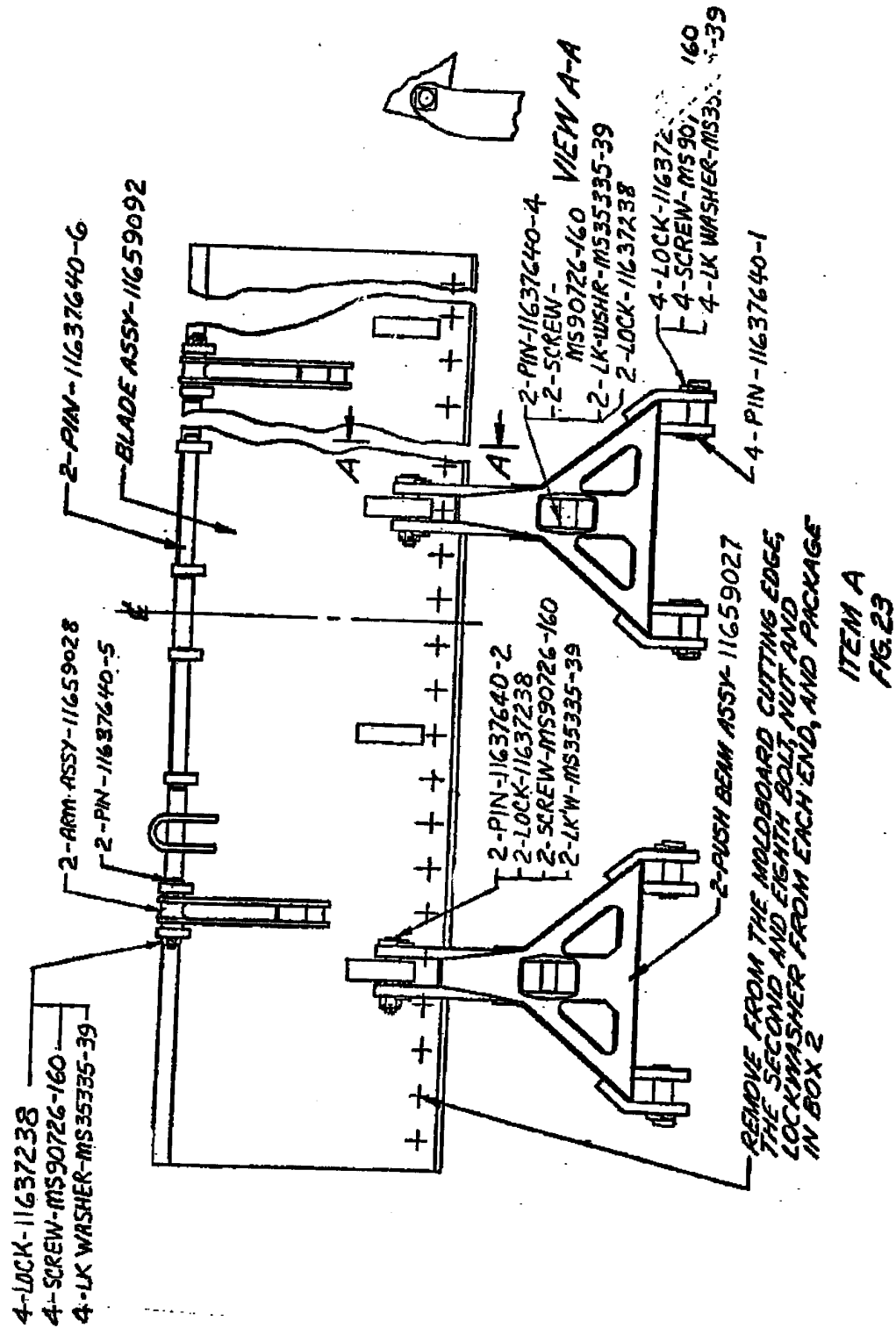
BOX 4

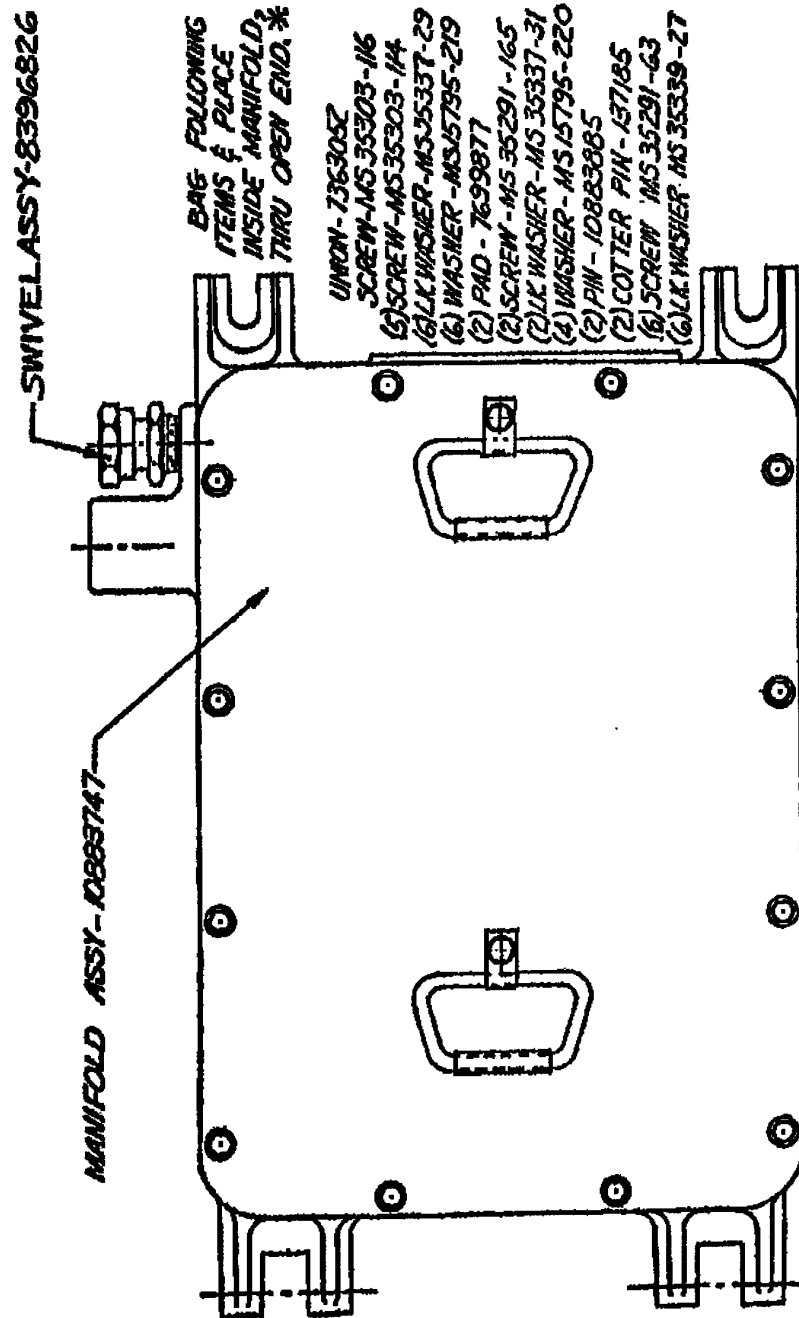
AO.	FIG. 50	10887468	LEVER CONTROL ASSY	1 W/
		MS35291-60	SCREW	1
		MS35337-27	LK WASHER	3
		MS15795-215	WASHER	1
		10887487	INDICATOR	1
		MS35291-34	SCREW	3
		10887445	BRACKET ASSY	1
		10887444	SHAFT	1
		124543	KEY	2
		10884185	ARM	2
		MS15795-214	WASHER	2
		MS35690-628	NUT	2
		10887740	ROD ASSY	1
		MS35691-622	NUT	2
		MS35337-26	LK WASHER	3
		MS35690-502	NUT	3

BOX 5

		10893561	TEMPLATE	1
		10934359	ADAPTER	2
		10952231	ANCHOR	4

FIG. 22K





* APPLY P-2 TO ALL UNPAINTED METAL
SURFACES & PACKAGE METHOD 1C-1

ITEM B
FIG 24

* ITEM RESTORED 7-27-77
SAC

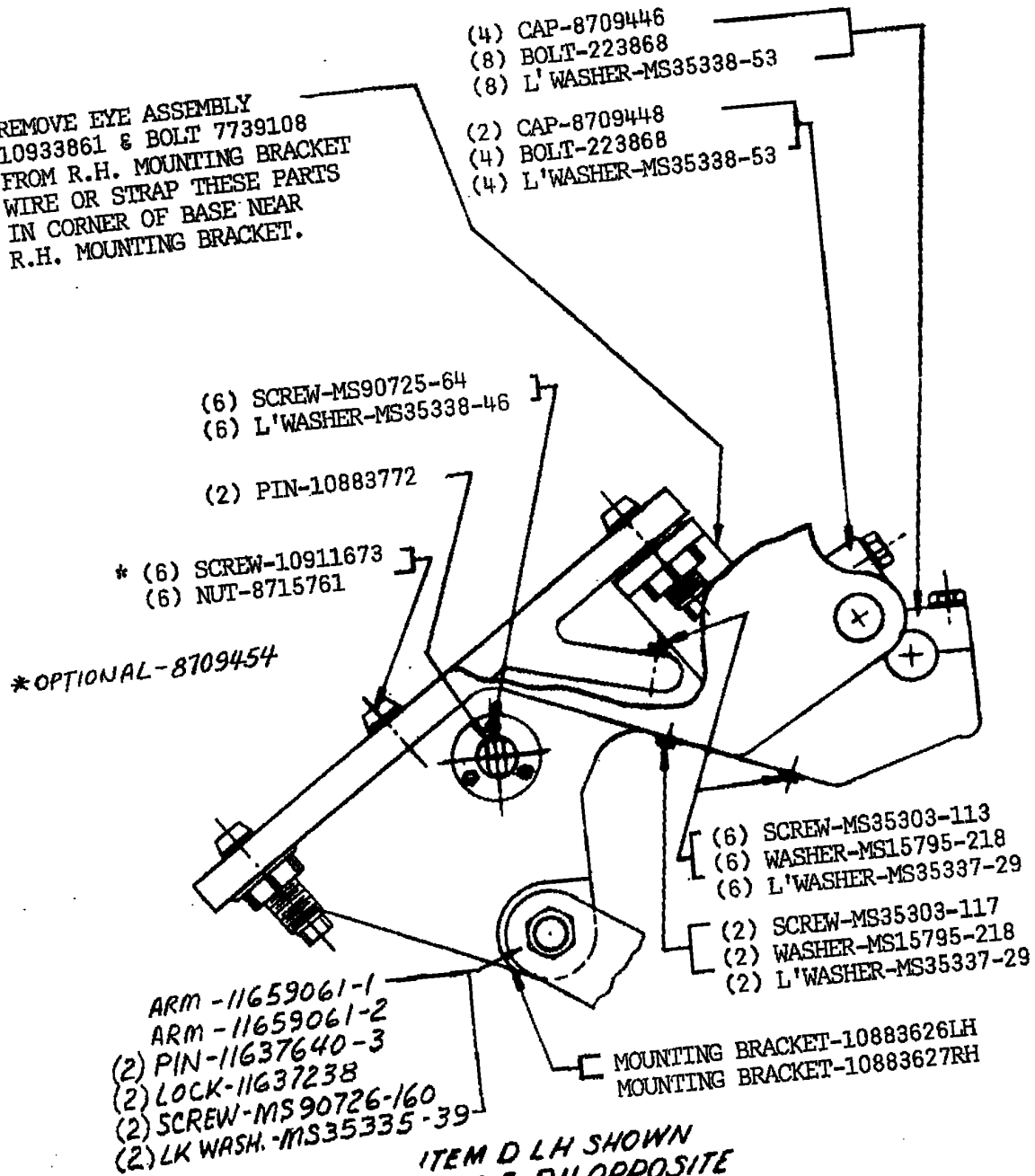
ATPD 2224

ITEM C

NOT COVERED BY FIGURE TYPE DRAWING
SEE PACKING LIST

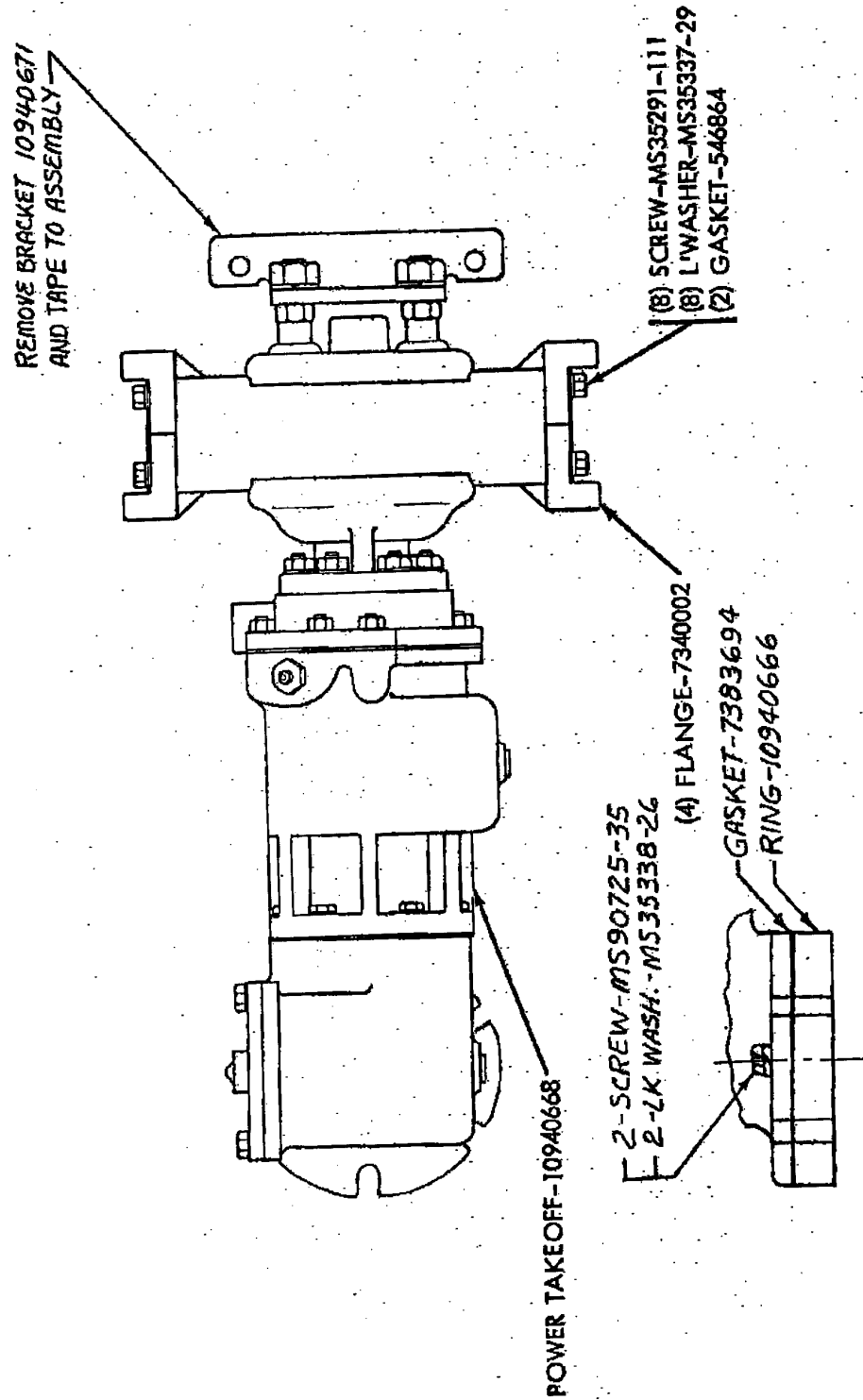
FIG. 25

REMOVE EYE ASSEMBLY
10933861 & BOLT 7739108
FROM R.H. MOUNTING BRACKET
WIRE OR STRAP THESE PARTS
IN CORNER OF BASE NEAR
R.H. MOUNTING BRACKET.

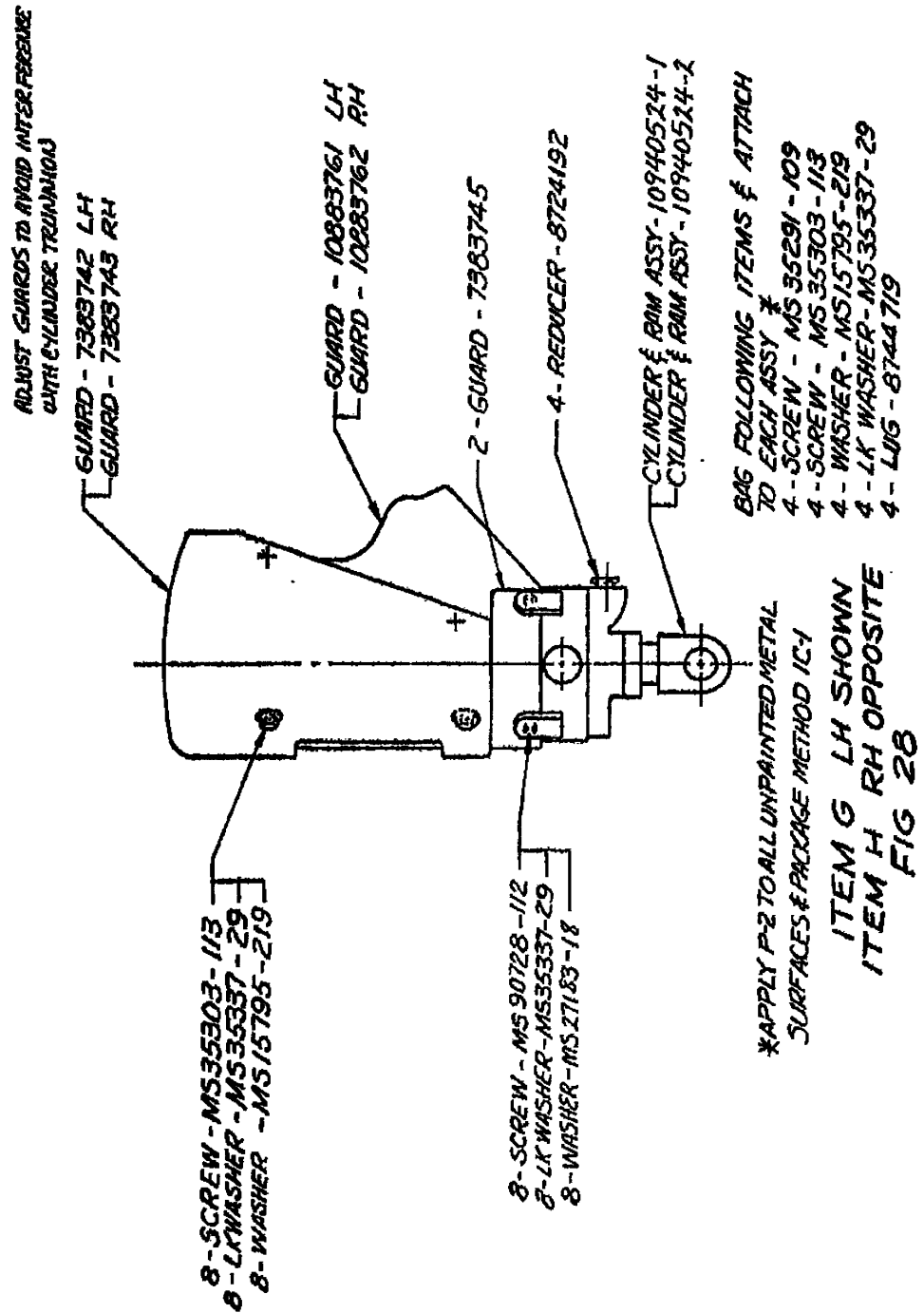


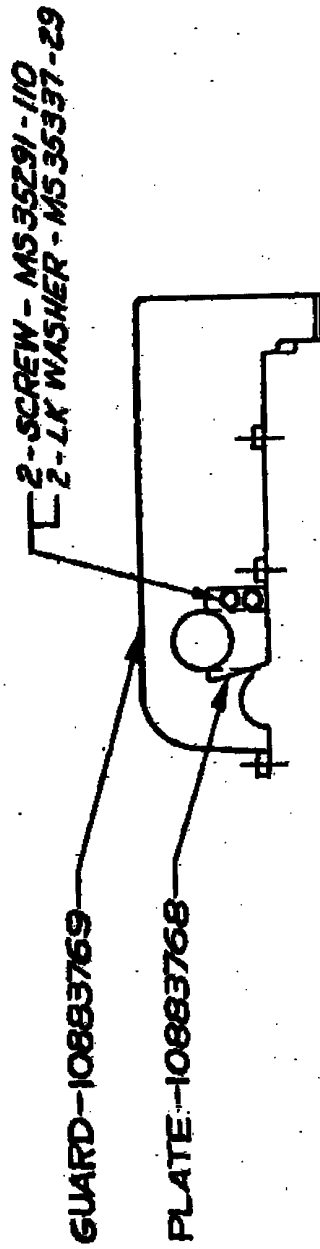
ITEM D LH SHOWN
ITEM E RH OPPOSITE

FIGURE 26.

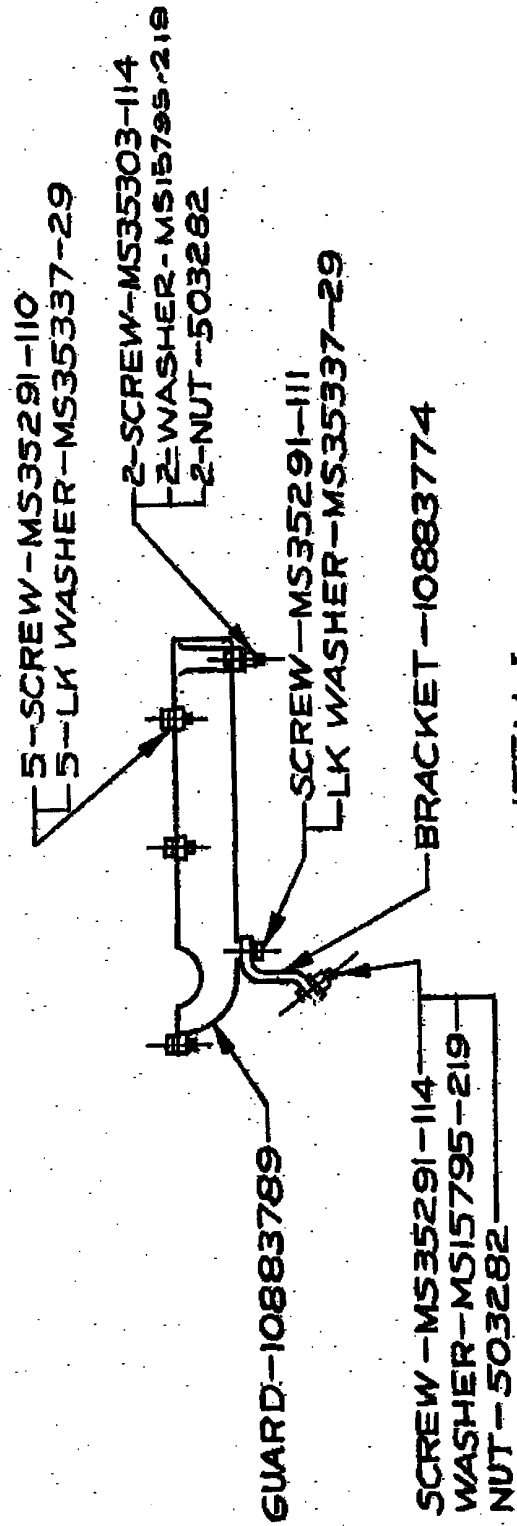


ITEM F
FIG 27

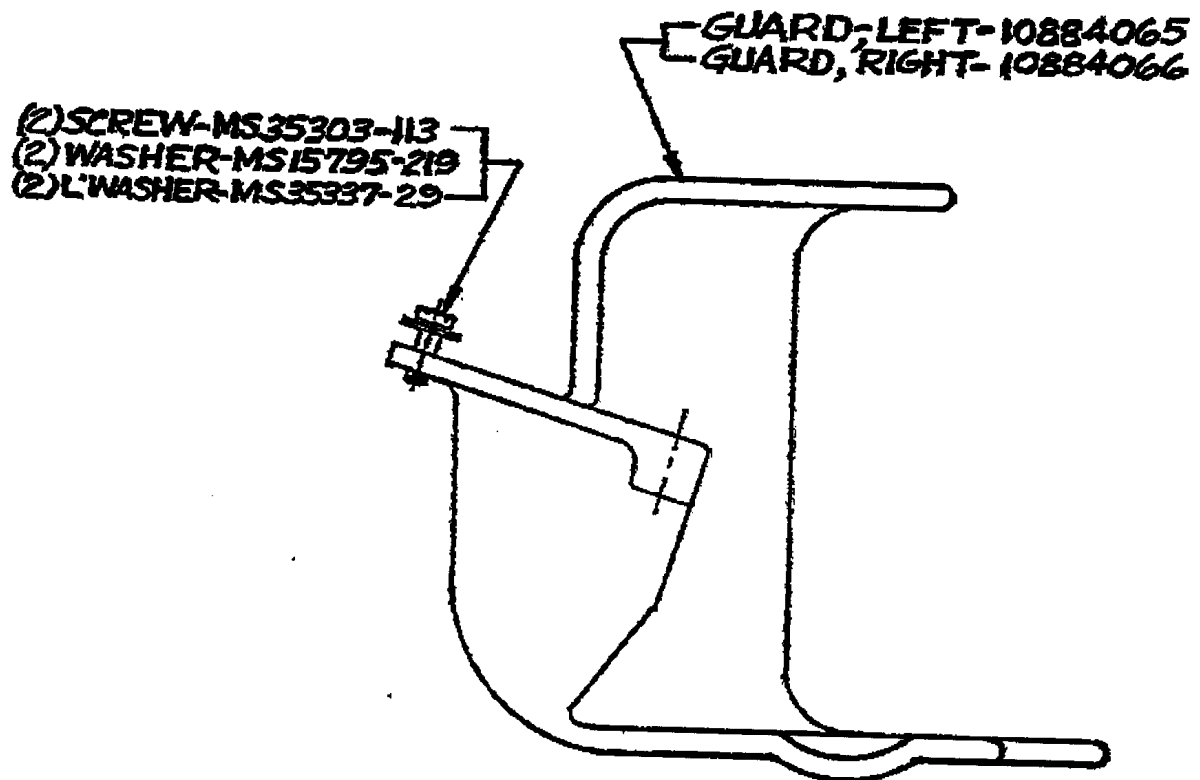




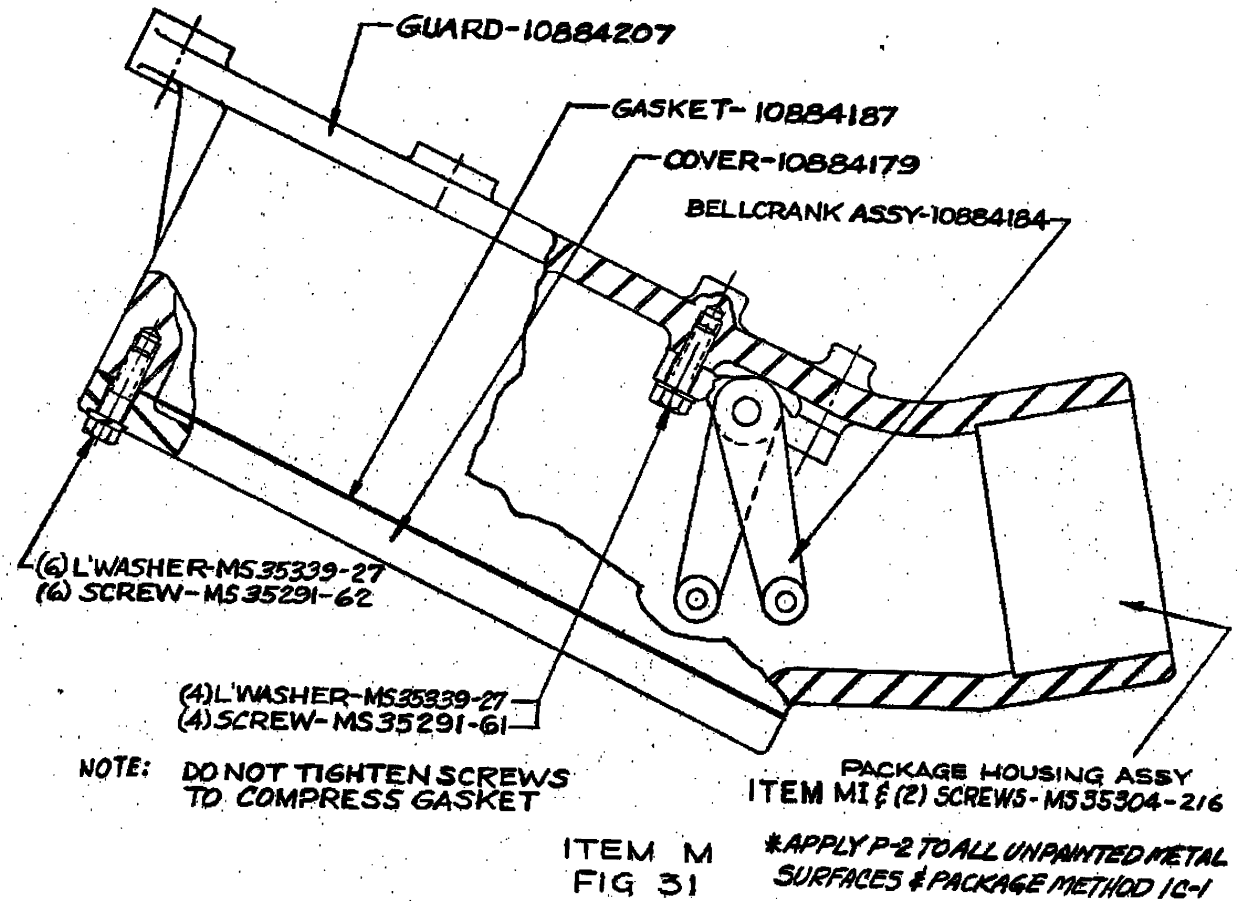
ITEM J

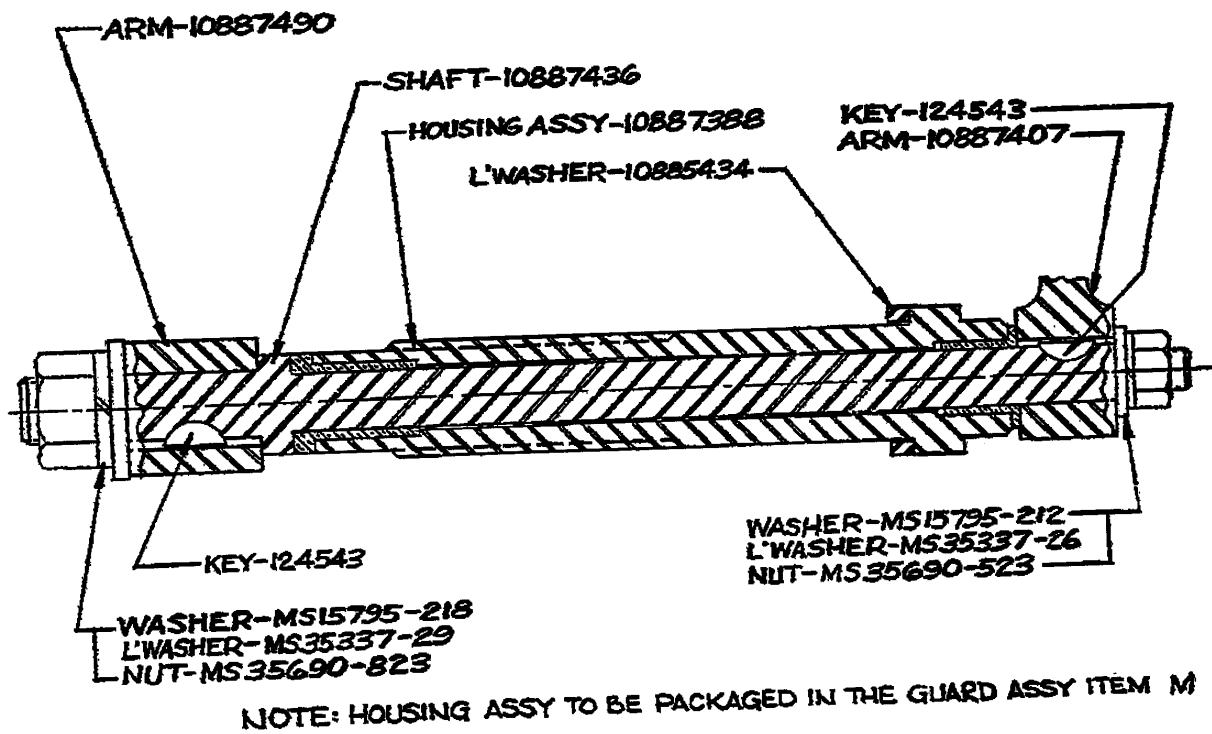


ITEM I
FIG 29

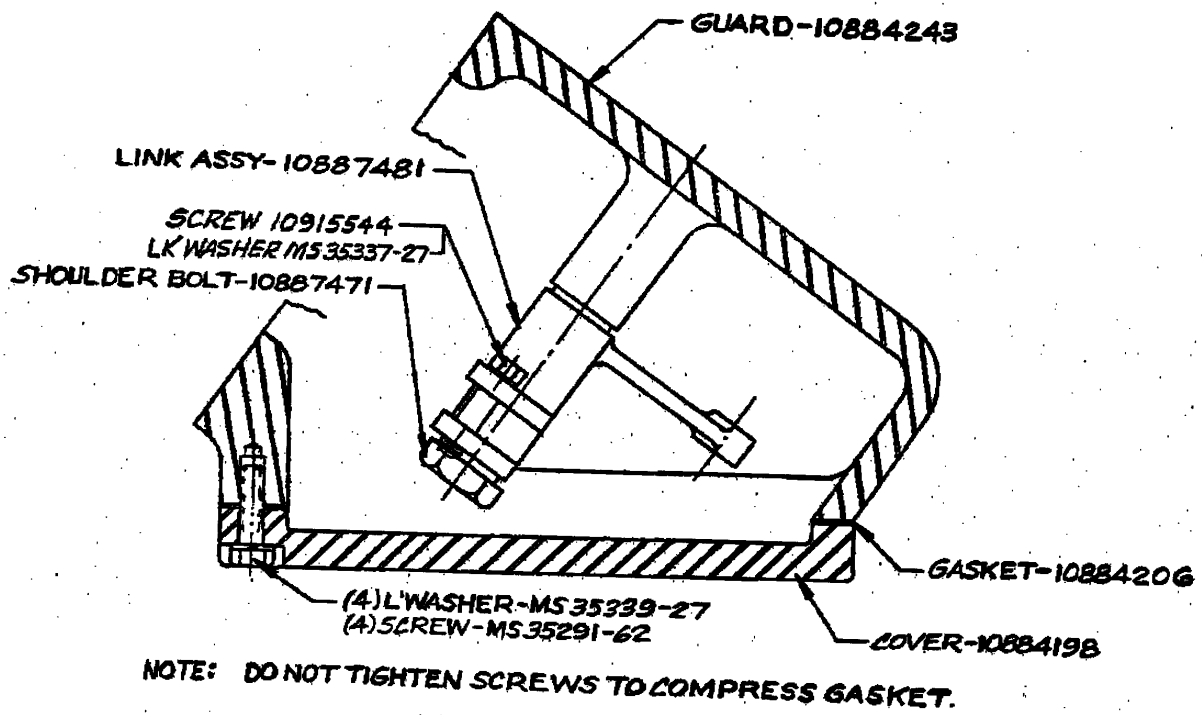


ITEM K LH SHOWN
ITEM L RH OPPOSITE
FIG. 30





ITEM MI
FIG. 32



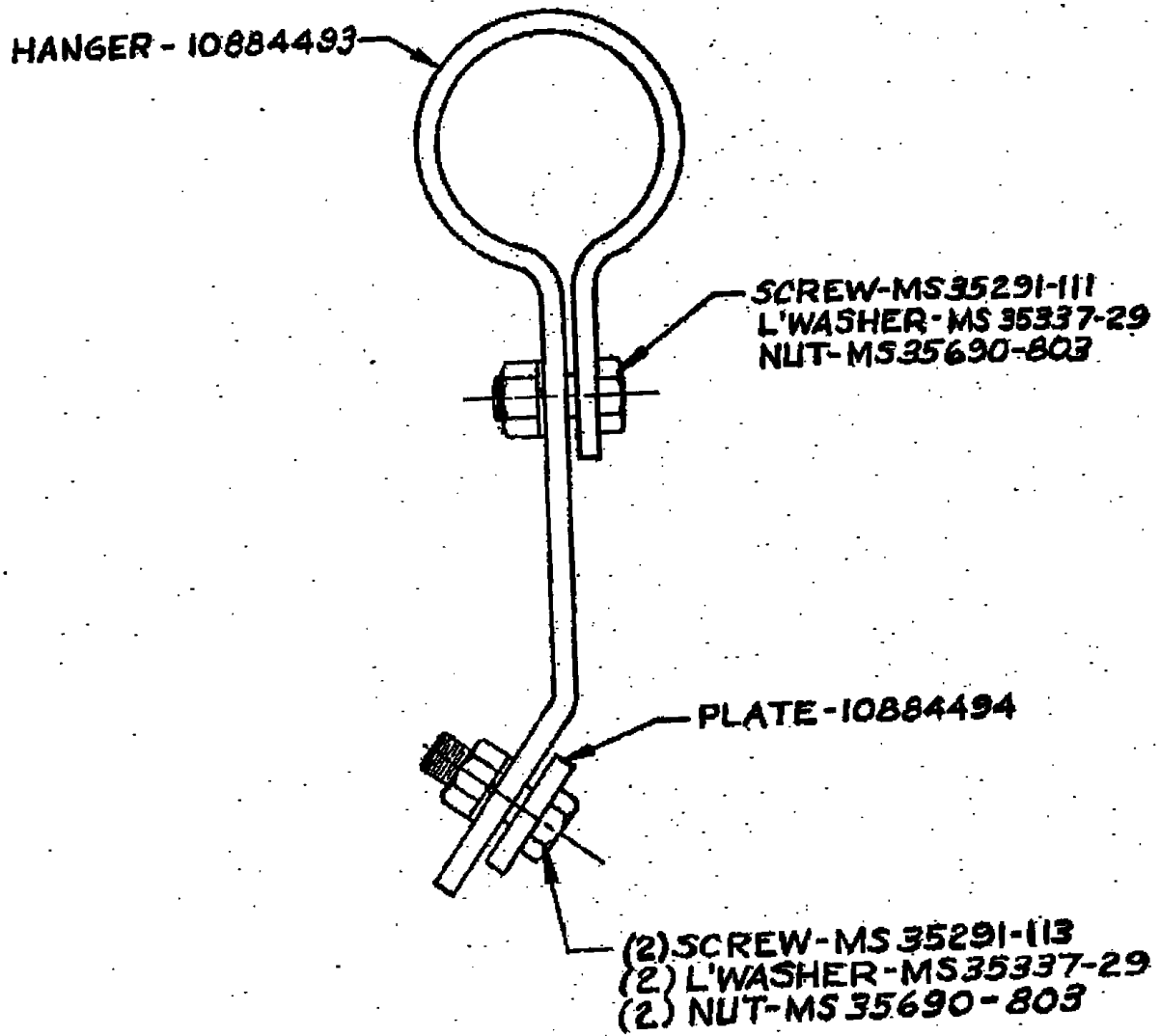
ITEM N
FIG 33

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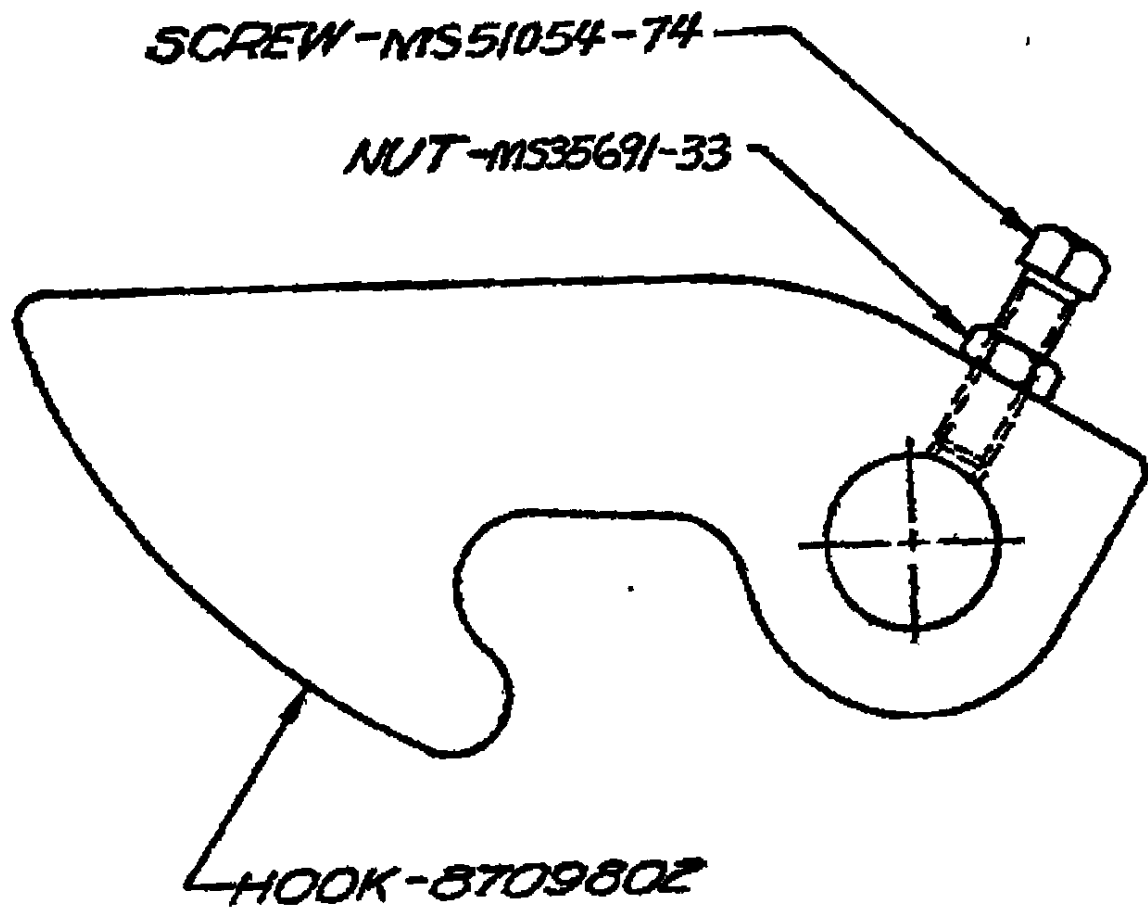
ITEM O THRU X

NOT COVERED BY FIGURE TYPE DRAWING
SEE PACKING LIST

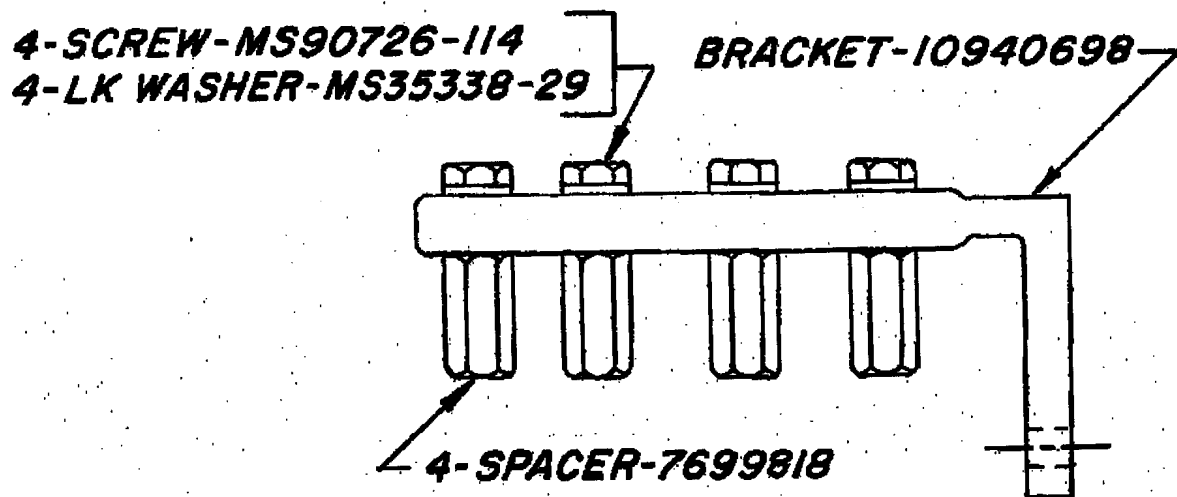
FIG. 34



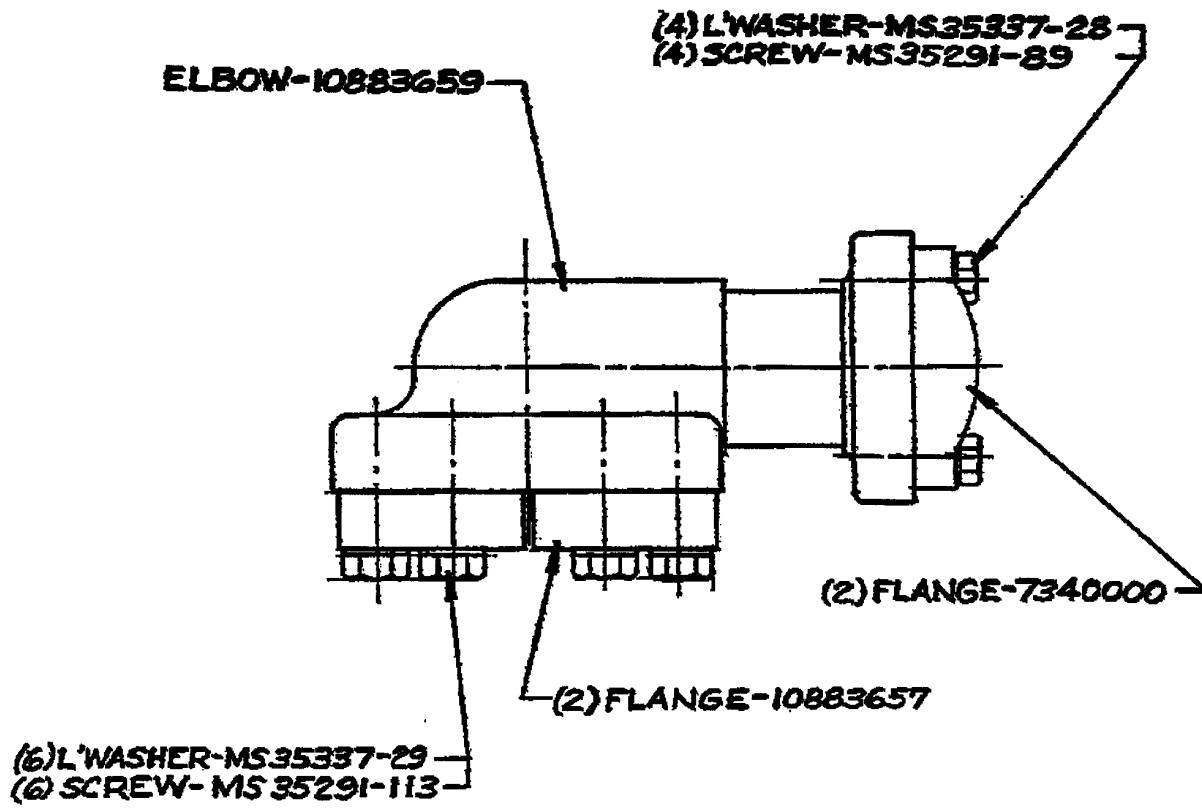
ITEM Y
FIG 35



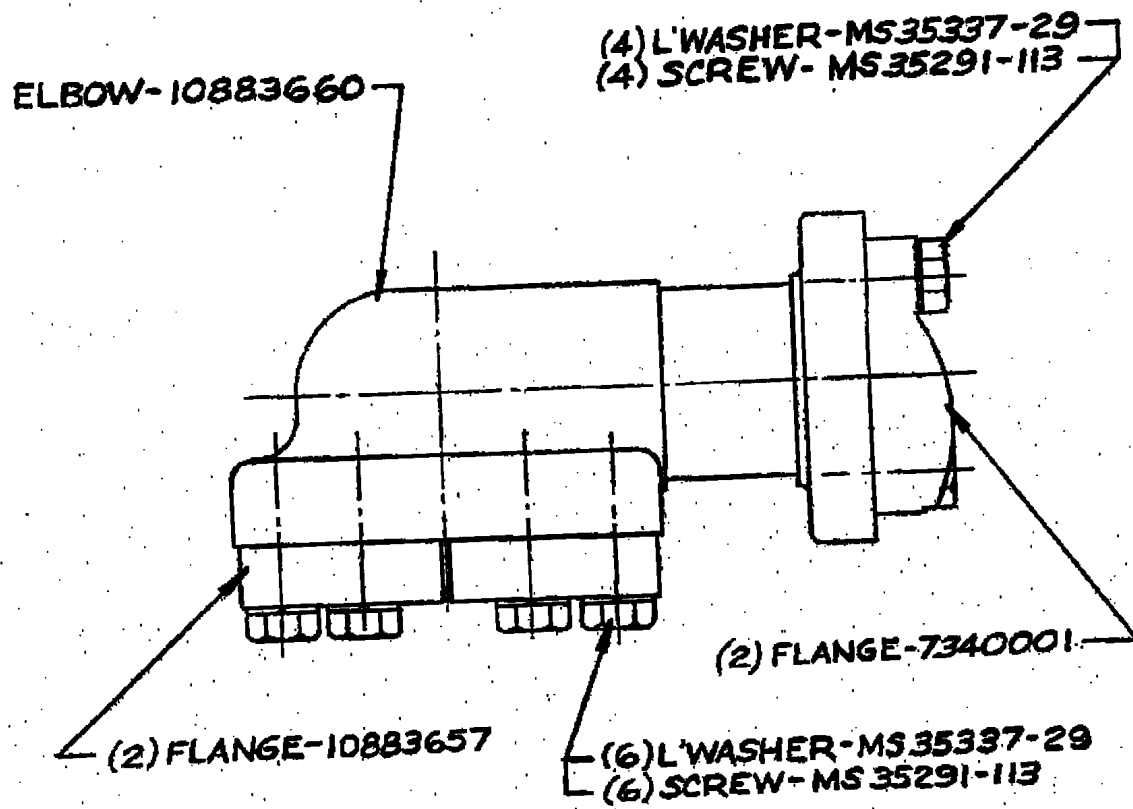
ITEM Z
FIG. 36



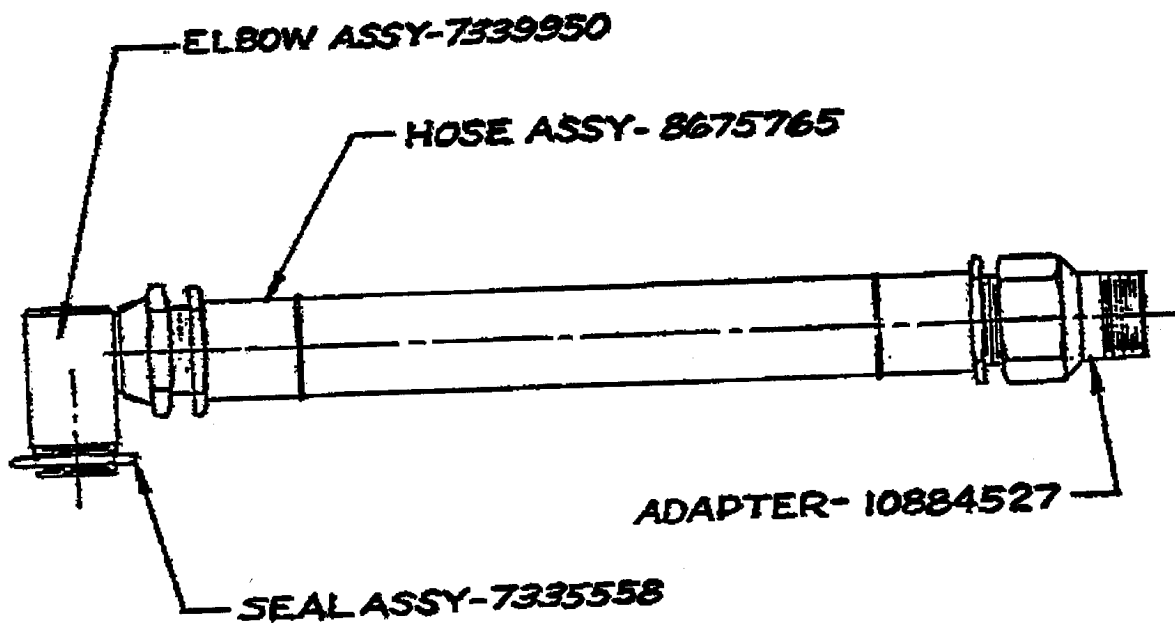
ITEM AA
FIG.37



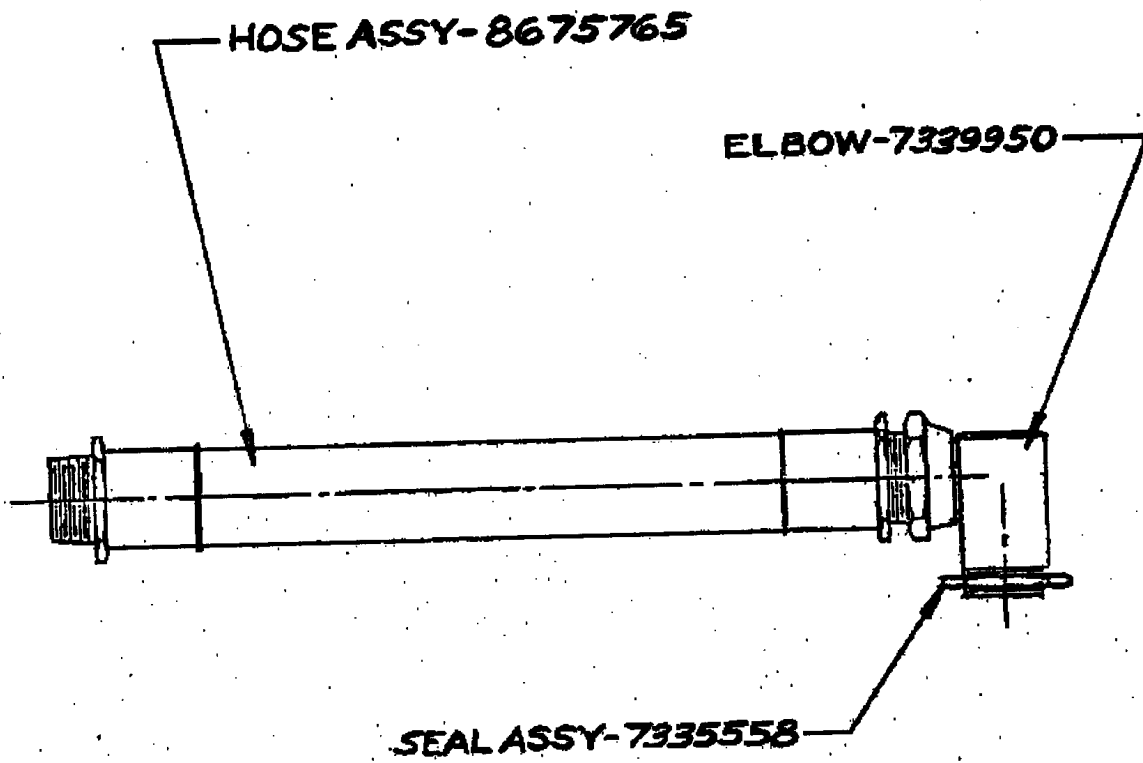
ITEM AB
FIG. 38



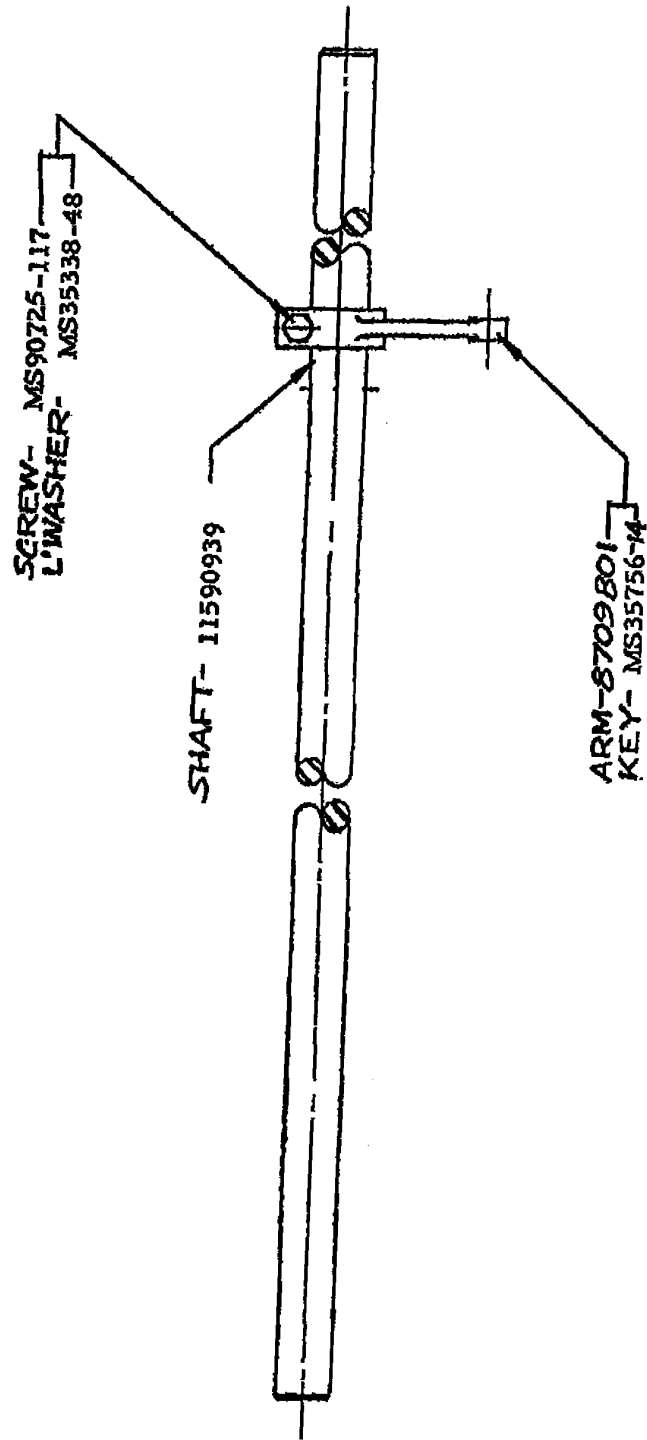
ITEM AC
FIG. 39



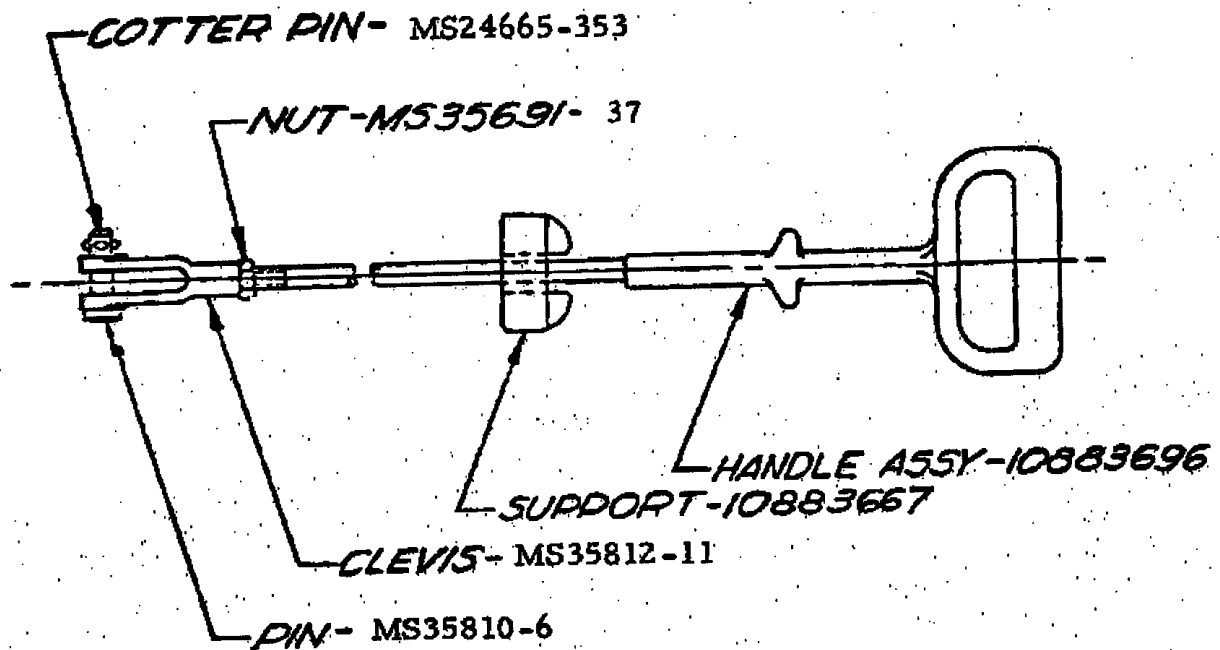
ITEM AD
FIG. 40



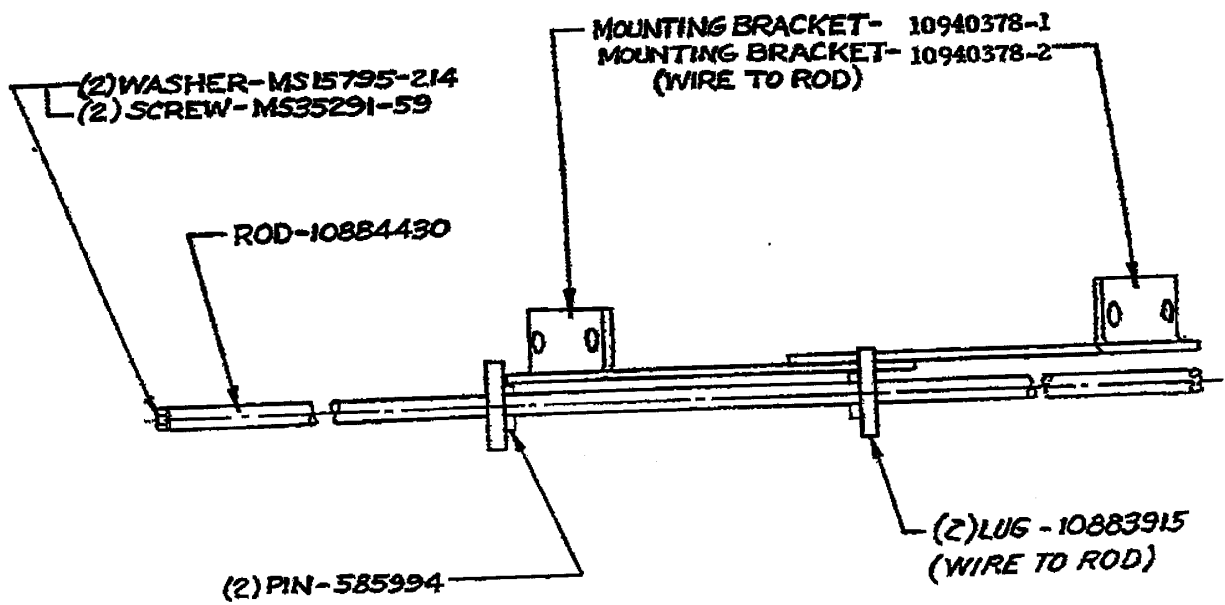
ITEM AE
FIG. 41



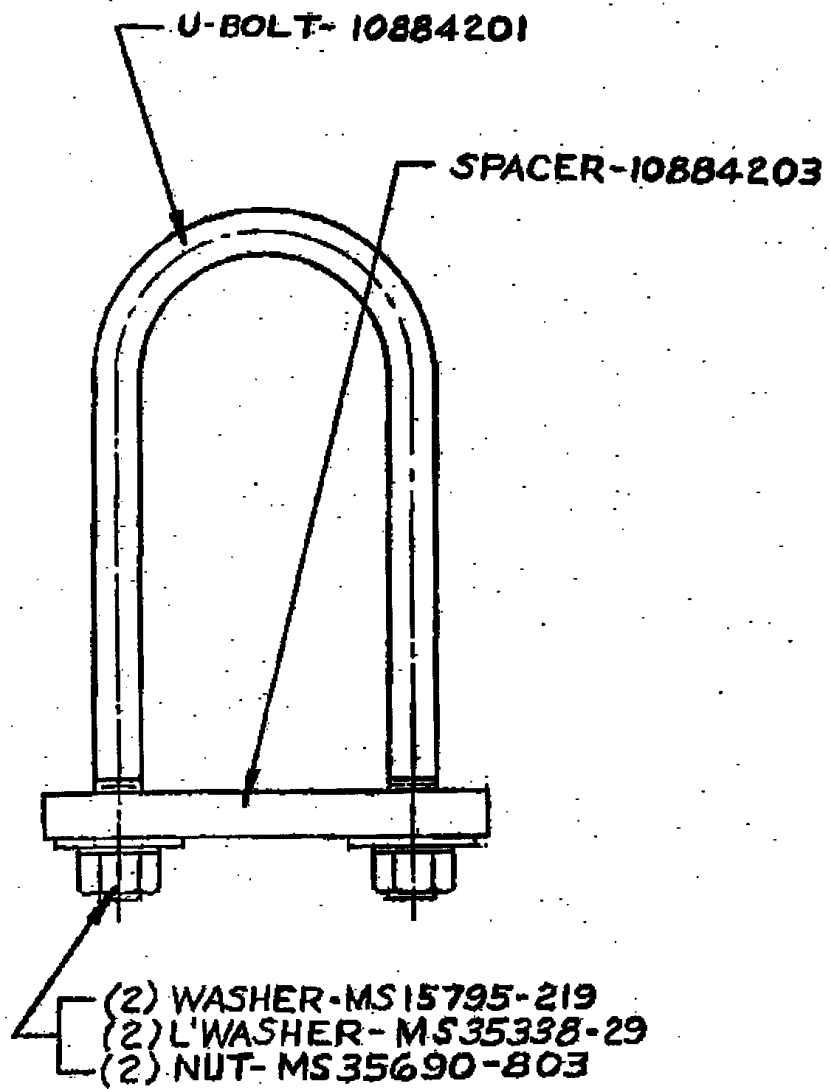
ITEM AF
FIG. 42



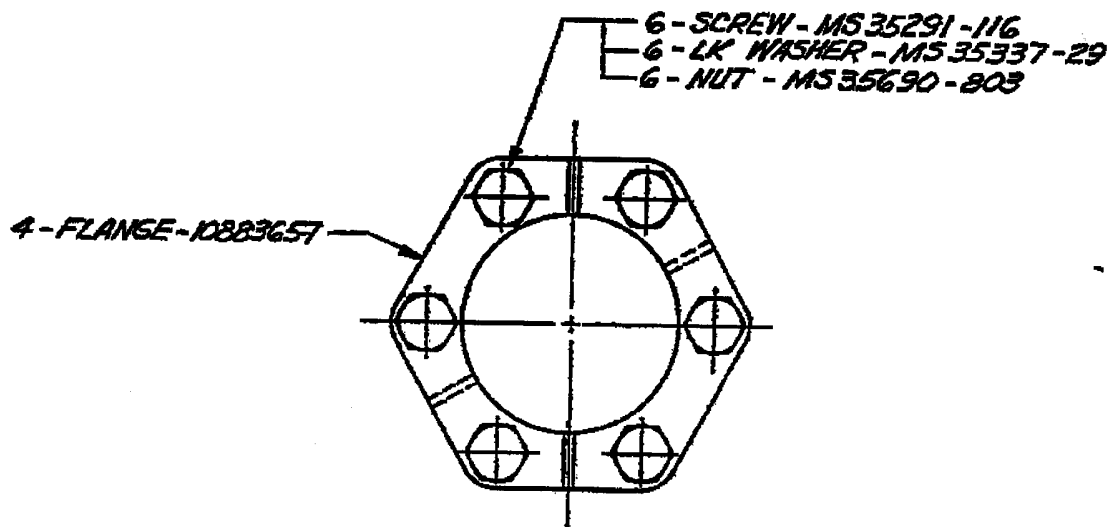
ITEM AG
FIG. 43



ITEM AH
FIG. 44



ITEM AI
FIG 45



ITEM AJ
FIG. 46

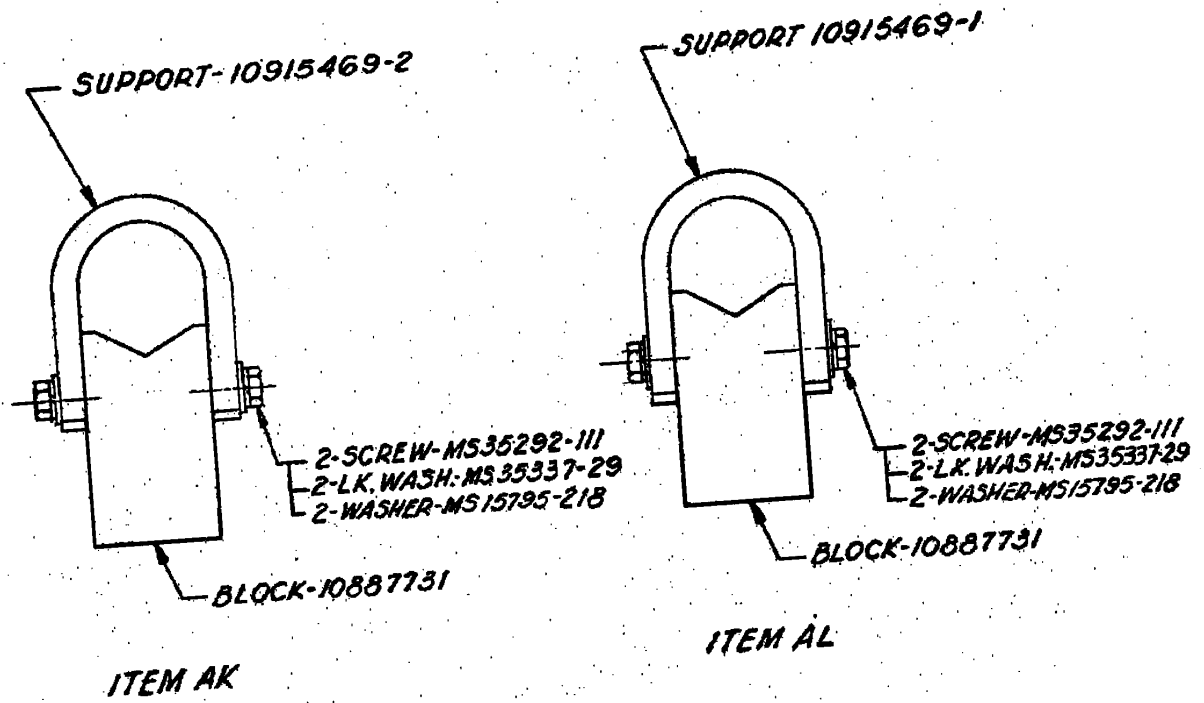
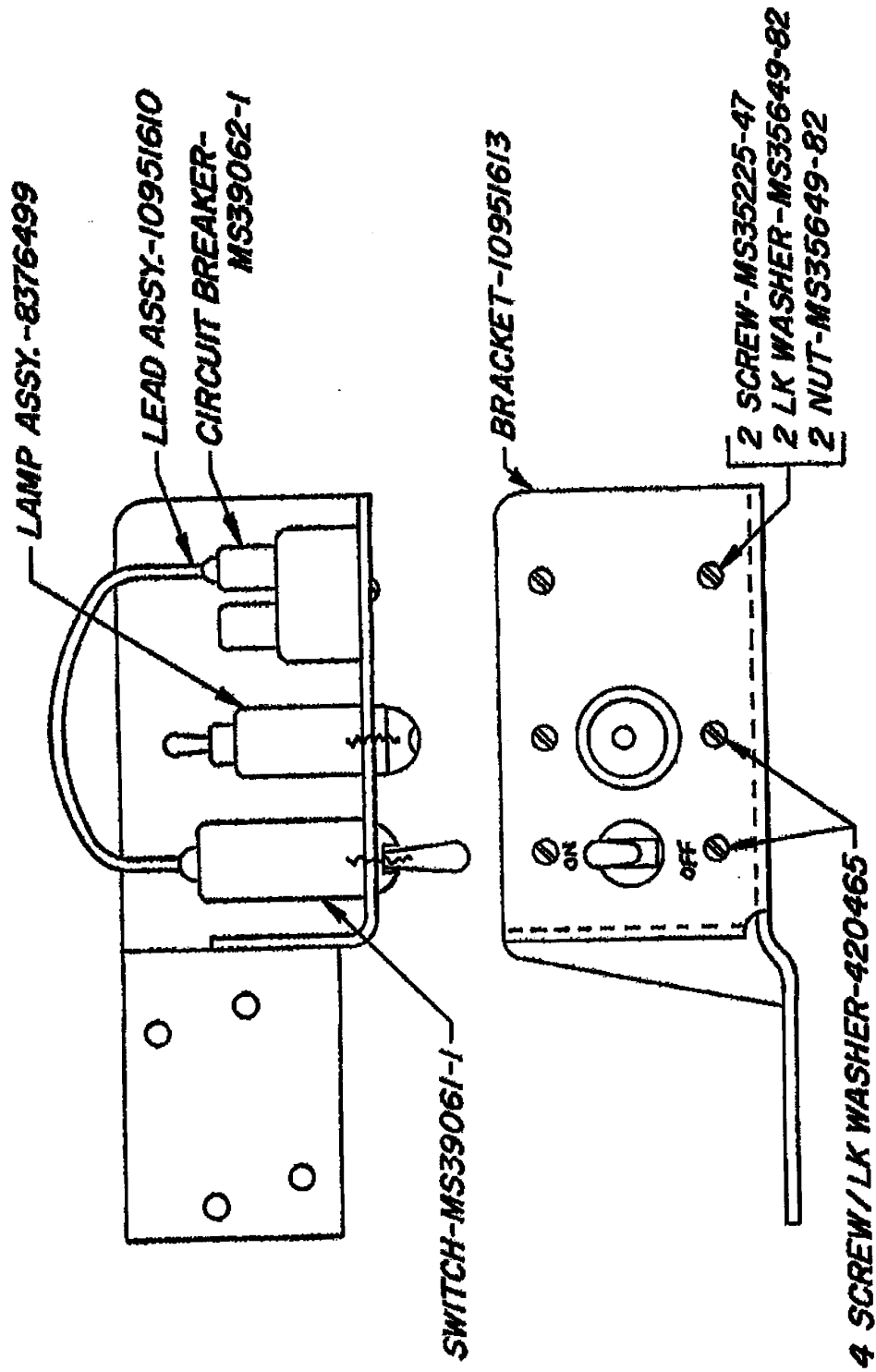
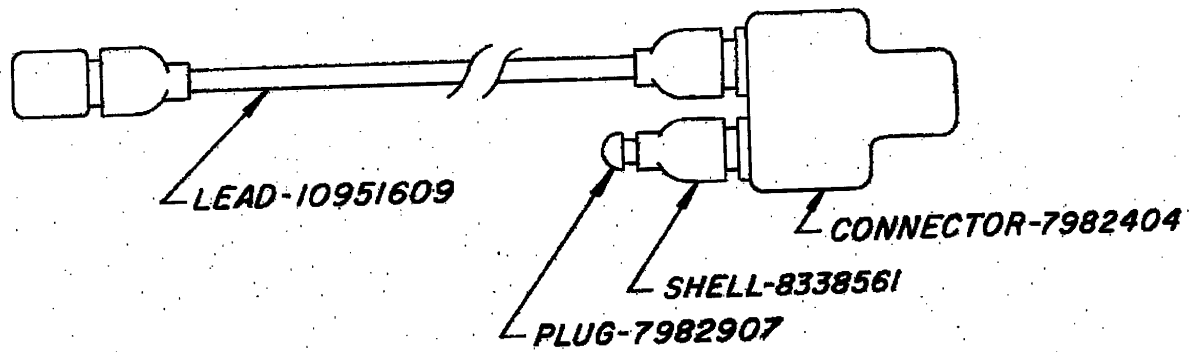


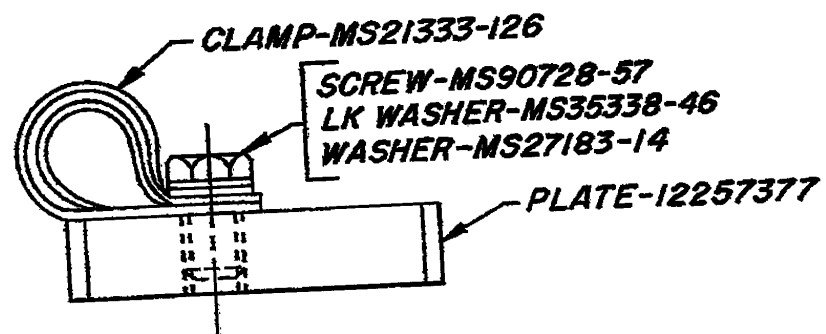
FIG. 47



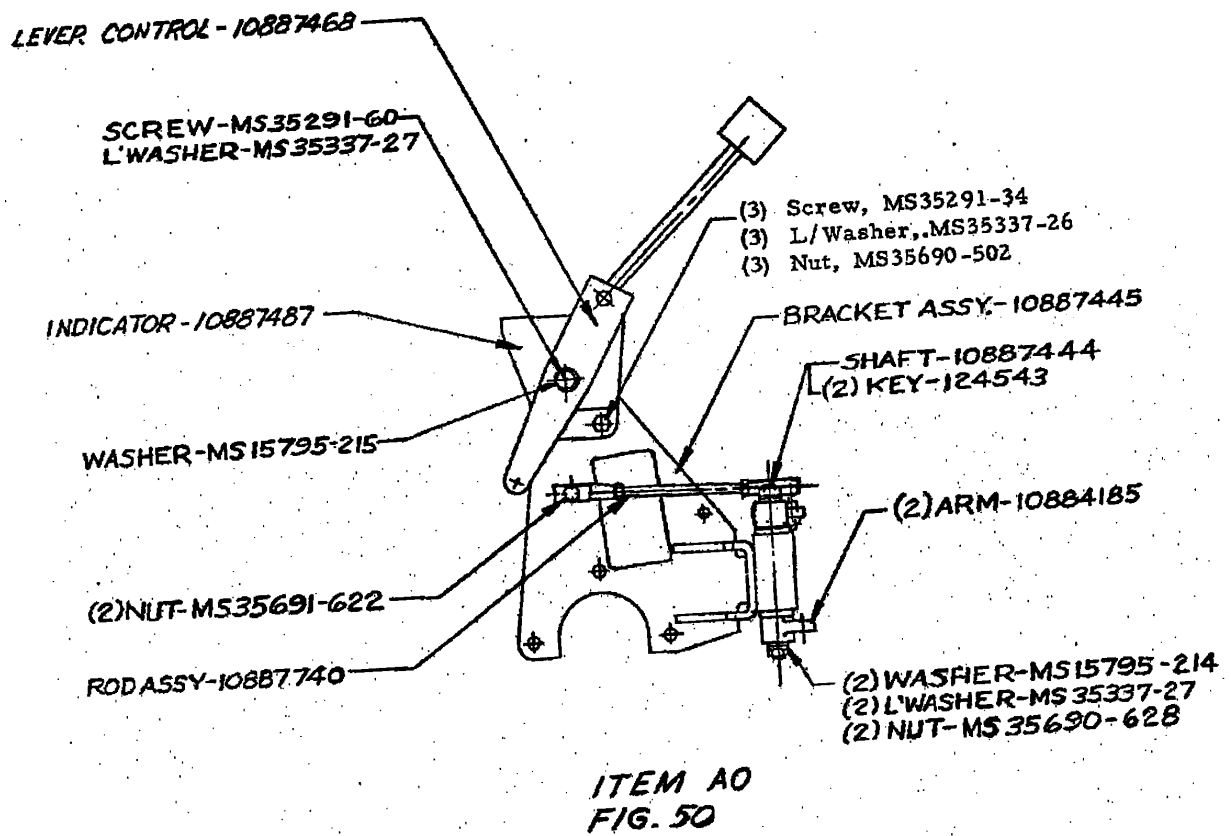
ITEM AM



ITEM AN
FIG. 49



ITEM AN-1
FIG. 49-1



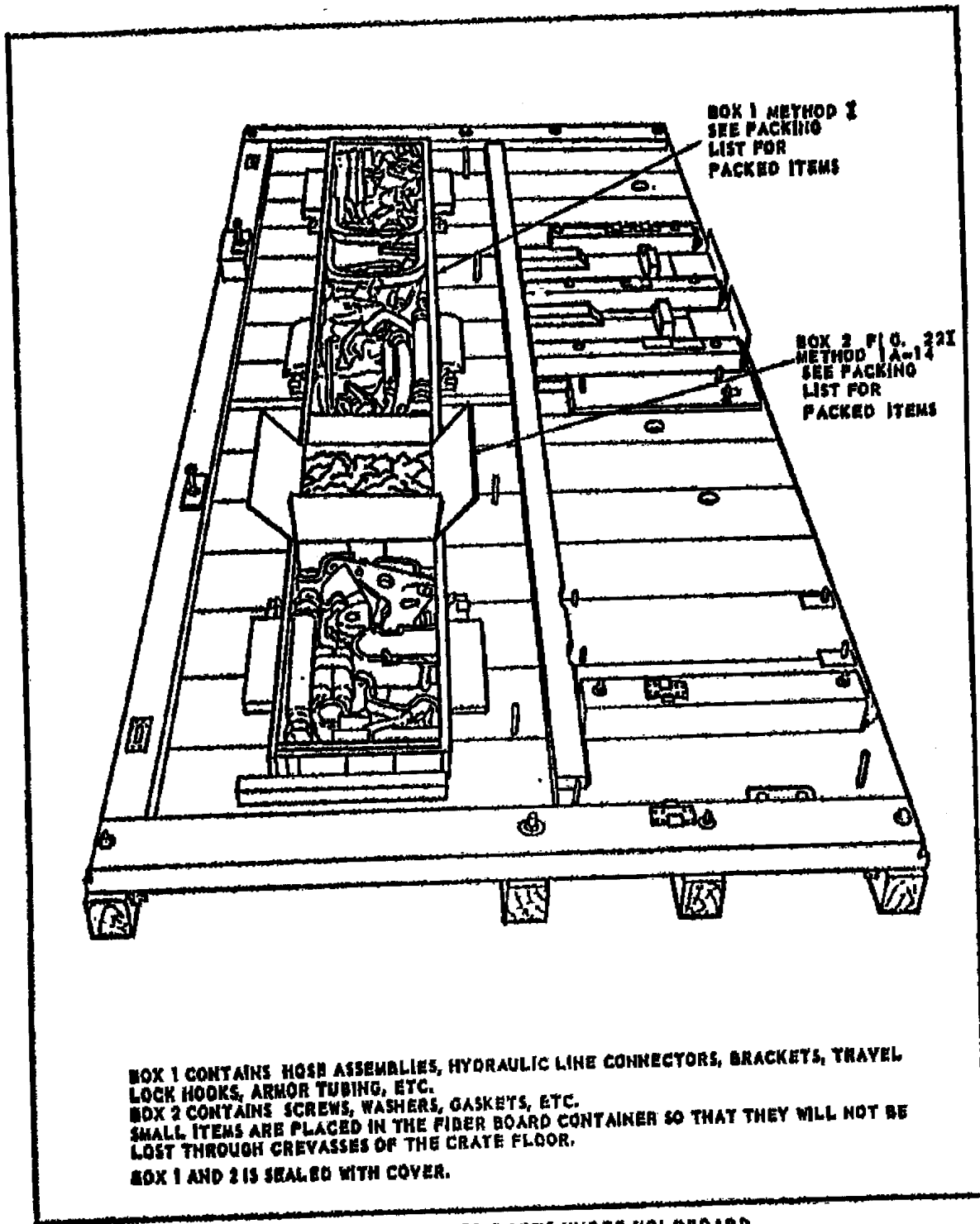
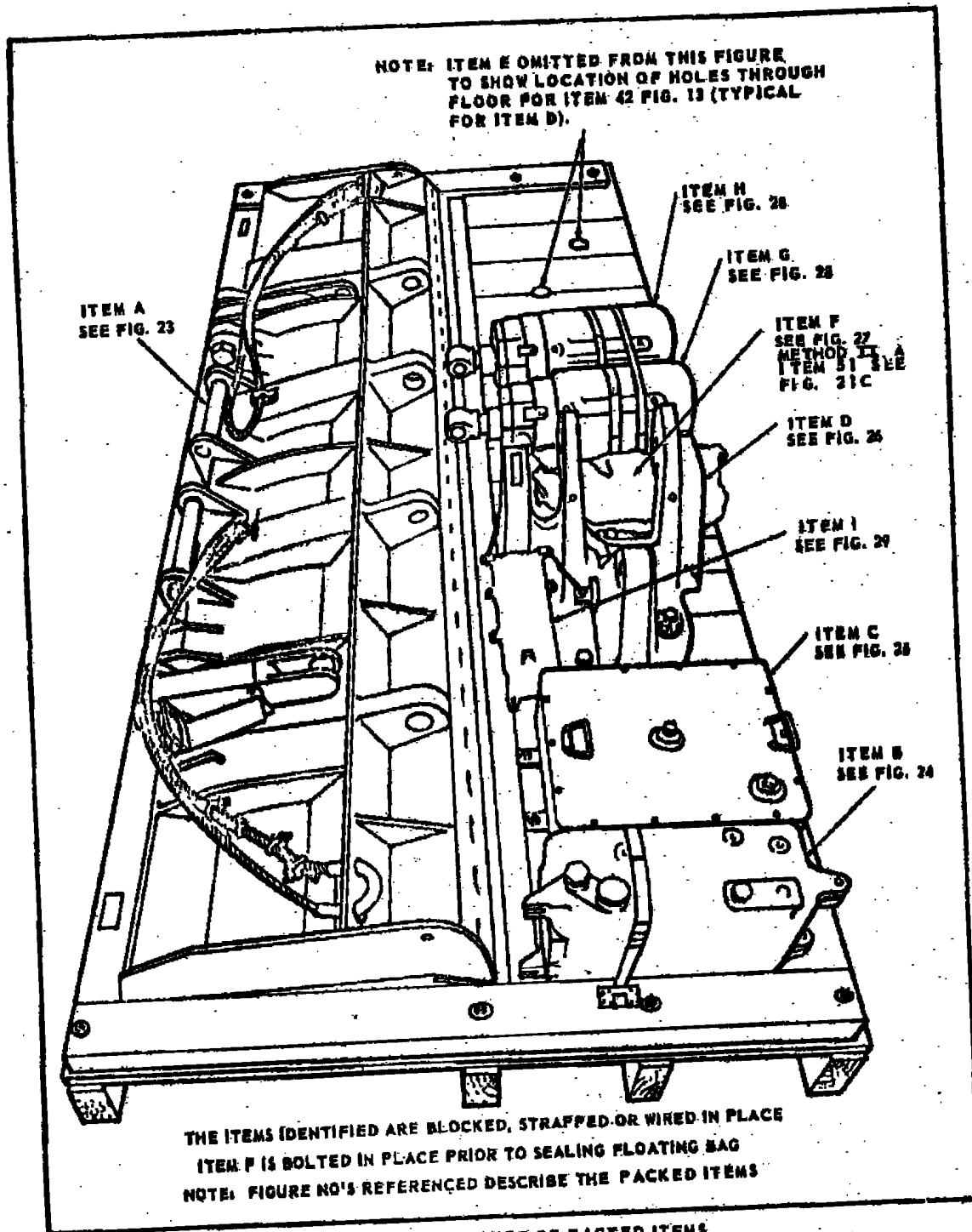


FIG. 31 PACKING OF PARTS UNDER MOLDBOARD



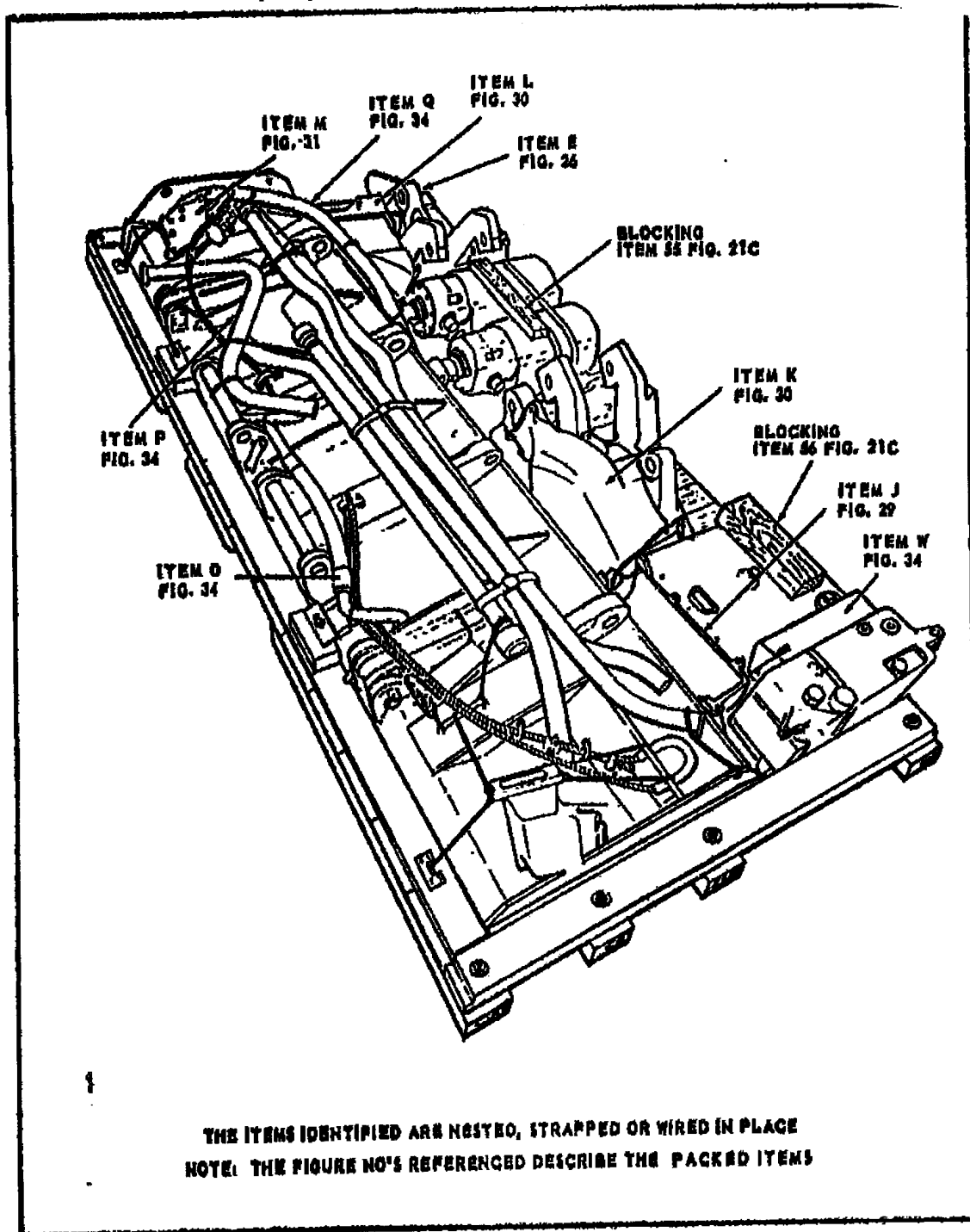


FIG. 53 SECOND LAYER OF PACKED ITEMS

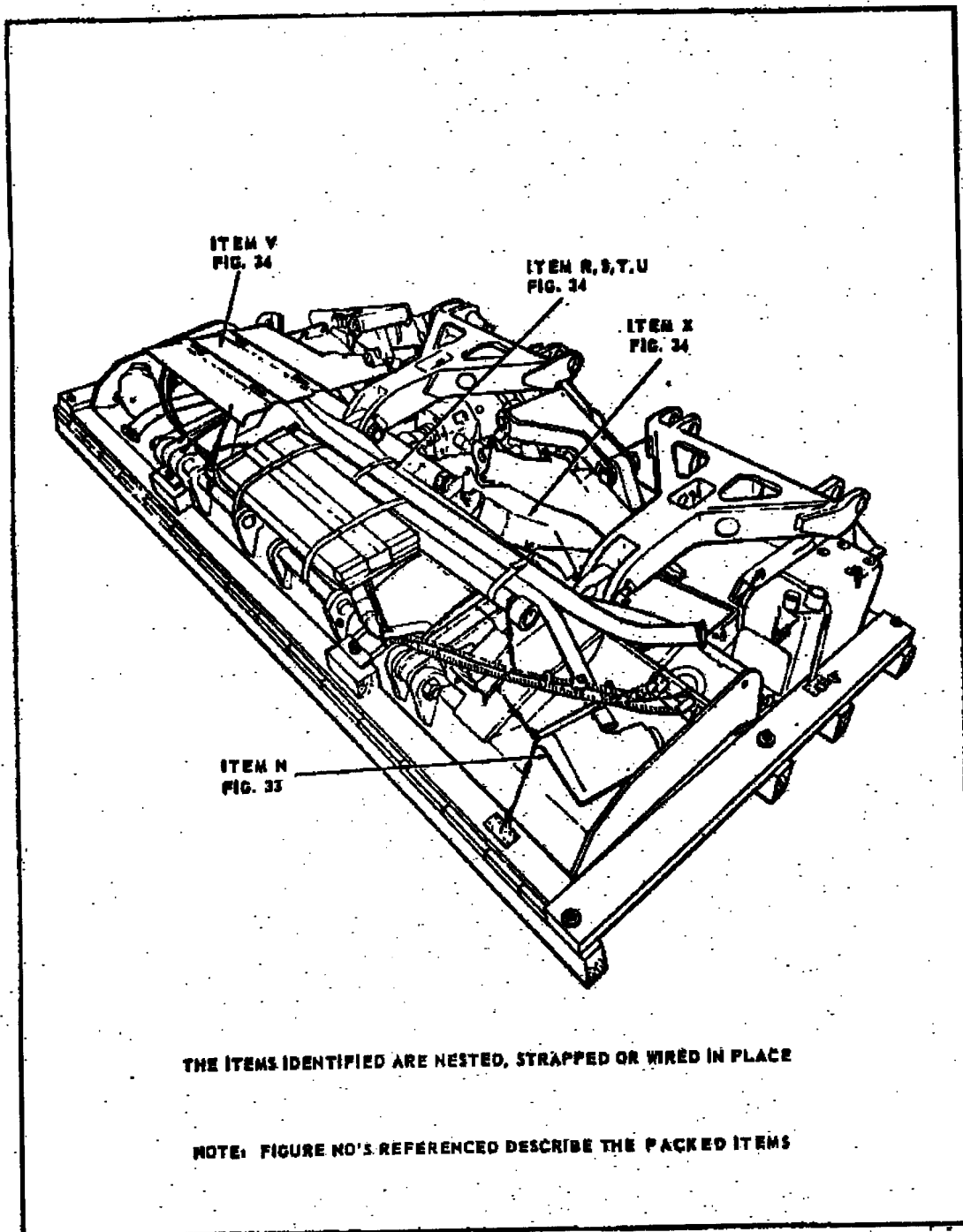


FIG. 54 THIRD LAYER OF PACKED ITEMS

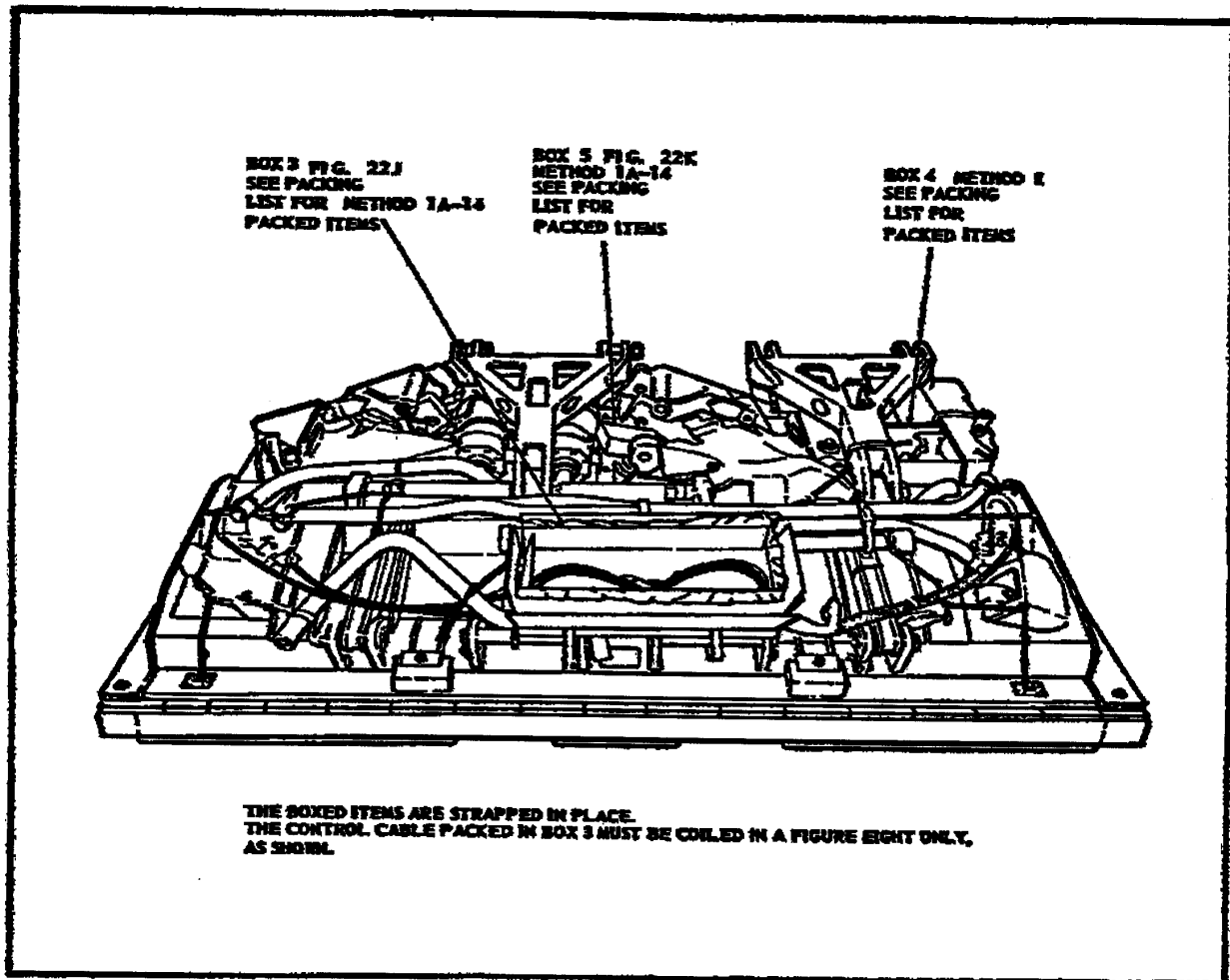
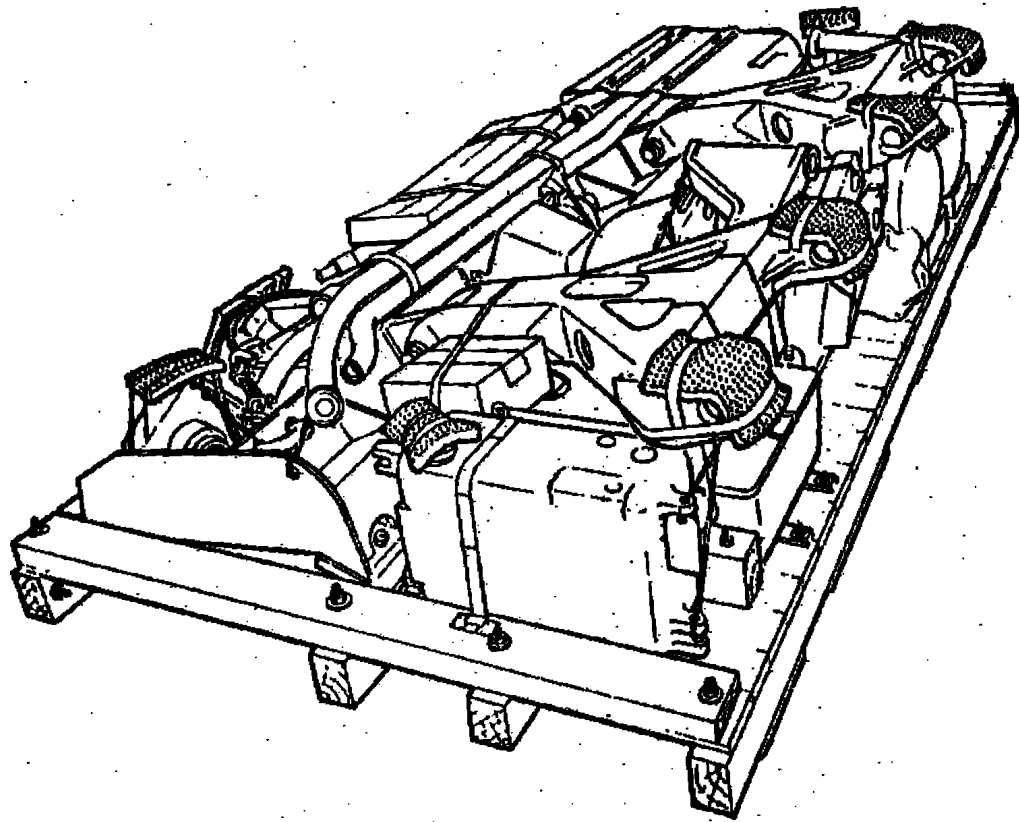


FIG. 55 EXPOSED VIEW OF BOXED ITEMS



CUSHIONING MATERIAL MUST BE APPLIED TO ALL PROJECTING AND/OR SHARP CORNERS
WHEN USING THE LEVEL C METHOD OF PACKING SHOWN ON FIG. 1A

FIG. 34 LEVEL METHOD OF PACKING